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<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
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 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
 65 70 75 80
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
 85 90 95
 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
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 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
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 130 135 140
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
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 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
 165 170 175
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
 180 185 190
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
 195 200 205
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
 210 215 220
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 225 230 235 240
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
 245 250 255
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
 260 265 270
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
 275 280 285
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
 290 295 300
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
 305 310 315 320
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
 325 330 335
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
 340 345 350
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
 355 360 365
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
 370 375 380
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
 385 390 395 400
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

405							410							415						
Asp	Gly	Thr	Ser	Ser	Tyr	Lys	Asp	Phe	Ala	Met	Ser	Lys	Asn	Asn	Arg					
420							425							430						
Phe	Thr	Ser	Ala	Gly	Gln	Ala	Ser	Lys	Asn	Ile	Ile	Gln	Pro	Pro	Ser					
435							440							445						
Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr					
450							455							460						
Phe	Thr	Lys	Leu	Cys	Asn	Asp	His	Glu	Val	Leu	Thr	Phe	Ile	Lys	Tyr					
465							470							475						
Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu					
485							490							495						
Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn					
500							505							510						
His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys					
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<211> 934
<212> DNA
<213> Homo sapiens
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240
accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgctac ggggcagtat
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420
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480
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780
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840
gataaatagt attcttggca gccctccacc ccatgtggcg gcggcagggc ccaggggagt
900
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<210> 3316
<211> 187
<212> PRT
<213> Homo sapiens

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Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu
35 40 45
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys
50 55 60
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val
65 70 75 80
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile
85 90 95
Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu
100 105 110
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Gly Lys
115 120 125
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu
130 135 140
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys
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Asn Phe Lys Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg
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<210> 3317
<211> 1665
<212> DNA
<213> Homo sapiens

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120
aaaagaagct gagaaaaaaa gatgccaaga ctggaagcat cgaagatggt gagcccttcc
180
caagtgtctac gttatgaagc tgccaaatta agaacactga gcaaagttaa ttctcccgt
240
gttgggaaag attatatatta ttttcttctt actttttaat gtctagatcc agaataaag
300
aagtttttag aaacctactg tgtggaggaa gagaagacca gtgccaaccc tgagactctg
360
ctggggggaga tggaggcgaa gacaagagag ctcattgcta gaagaaccac acctcttttg
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa
 480
 cggaggagga gagagttaga aaagaaacgt ttgcgggaag aggaaaaaag aagaagaaga
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 gaagaagaaa gatgcaaaaa aaaagagaca gataaacaga agaaaattgc agagaaagaa
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 720
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 780
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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

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  50              55              60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile
  65              70              75              80
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys
      85              90              95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu
      100              105              110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser
      115              120              125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His
      130              135              140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr
      145              150              155              160
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg
      165              170              175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly
      180              185              190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu
      195              200              205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala
      210              215              220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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  120
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  600

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<210> 3320

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3320

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			20					25					30		
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
		35					40					45			
Ala	Ala	Glu	Ile	Val	Thr	Asp	Ile	Phe	Ile	Ser	Trp	Phe	Pro	Phe	Tyr
		50				55				60					
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
65				70				75				80			
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85					90				95			
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
		100					105					110			
Ser	Tyr	Glu	Thr	Val	Leu	Ser	Phe	Gly	Lys	Arg	Gly	Leu	Asn	Ile	Ala

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130	135	140
Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp		
145	150	155
Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val		
165	170	175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp		
180	185	190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg		
195	200	205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu		
210	215	220
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225	230	235
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<210> 3321

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 3321

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900

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<210> 3322

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3322

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			20					25					30		
Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr
			35				40						45		
Ser	Glu	Gln	Met	Arg	Thr	Leu	Phe	Ser	Phe	Leu	Gly	Glu	Ile	Glu	Glu
			50				55				60				
Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys
65					70					75				80	
Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
				85					90					95	
His	Leu	Thr	Asn	Thr	Val	Phe	Ile	Asp	Arg	Ala	Leu	Ile	Val	Val	Pro
			100					105					110		
Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu
			115					120					125		
Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
			130				135					140			
Pro	Ile	Pro	Thr	Pro	Asn	Pro	Leu	Thr	Thr	Leu	Gly	Val	Ser	Leu	Ser
145					150					155				160	
Ser	Leu	Gly	Ala	Ile	Pro	Ala	Ala	Ala	Leu	Asp	Pro	Asn	Ile	Ala	Thr
				165					170					175	
Leu	Gly	Glu	Ile	Pro	Gln	Pro	Pro	Leu	Met	Gly	Asn	Val	Asp	Pro	Ser
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Lys	Ile	Asp	Glu	Ile	Arg	Arg	Thr	Val	Tyr	Val	Gly	Asn	Leu	Asn	Ser

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Gln Thr Thr Thr Ala Asp Gln Leu Leu Glu Phe Phe Lys Gln Val Gly		
210	215	220
Glu Val Lys Phe Ala Asp Gly Arg Ile Asn His Ser Asn Asn Ala Ile		
225	230	235
Val Lys Pro Pro Glu Met Thr Pro Gln Ala Ala Ala Lys Glu Leu Glu		
245	250	255
Glu Val Met Lys Arg Val Arg Glu Ala Gln Ser Phe Ile Ser Ala Ala		
260	265	270
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			500					505					510			
Leu	Asp	Ser	Ala	Ala	Arg	Asp	Glu	Leu								
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<210> 3329
<211> 705
<212> DNA
<213> Homo sapiens
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120
aatgaccggc ggctgcacgc ggagcctgtg cccactctcg ccttcaccca cgtggctcgt
180
gctcaagctg ggatgtacca ctgcctggct gagctcccca ctggggctgc tgcctctgct
240
ccagtcatgc tccgtgtgct ctaccctccc aagacgccca ccatgatggt cttcgtggag
300
cctgaggggtg gcctccgggg catcctggat tgccgagtgg acagcgagcc gctcgccagc
360
ctgactctcc accttggcag tcgactgggtg gcctccagtc agccccaggg tgctcctgca
420
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gagccacaca tccatgtcct ggcttcccc aatgccctga ggggtggacat cgagggcgctg
 480
 aggcccagcg accaagggga atacatctgt tctgcctcaa atgtcctggg ctctgcctct
 540
 acctccacct actttggggg cagagccctg caccgcctgc atcagttcca gcagctgctc
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 660
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 705

<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

Xaa	Ala	Arg	Val	Val	Ala	Glu	Pro	Gly	Leu	Asp	Val	Pro	Glu	Gly	Ala
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Ala	Leu	Asn	Leu	Ser	Cys	Arg	Leu	Leu	Gly	Gly	Pro	Gly	Pro	Val	Gly
		20					25					30			
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35				40					45				
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
	50				55					60					
Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
65				70					75					80	
Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
			85					90					95		
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
		100					105					110			
Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
	115						120					125			
Leu	Val	Ala	Ser	Ser	Gln	Pro	Gln	Gly	Ala	Pro	Ala	Glu	Pro	His	Ile
	130				135						140				
His	Val	Leu	Ala	Ser	Pro	Asn	Ala	Leu	Arg	Val	Asp	Ile	Glu	Ala	Leu
145				150					155					160	
Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
			165					170					175		
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
		180					185						190		
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
	195					200					205				
Leu	Leu	Leu	Leu	Leu	Leu	Gly	Leu	Gly	Ala	Cys	Tyr	Thr	Trp	Arg	Arg
	210				215						220				
Arg	Arg	Val	Cys	Lys	Gln	Ser	Met	Gly	Glu	Asn					
225				230						235					

<210> 3331

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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120
atattaagga tgaattcagg aaggcctgag accatggaaa acttgccctgc tctctacact
180
attttccaag gagaggttgc tatggtgaca gactatgggg cctttatcaa aatcccaggc
240
tgtcggaagc aaggtctggc ccatcgaact catatgtcat cctgtcgggt ggataagccc
300
tctgagatag tagatgttgg agataaagtg tgggtgaagc ttattggccg agagatgaaa
360
aatgatagaa taaaagtatc cctctccatg aaggttgtca atcaaggagc tgggaaagac
420
cttgatccca acaatgtttc attgagcaag aagagaggcg gaggcgatcc ttccaggatt
480
acactgggca gaagatcacc cttgaggctg tcttgaacac tacctgcaag aagtgtggct
540
gtaaaggcca ctttgcaaaa gattgtttca tgcaaccagg tgggactaaa tactctctga
600
tacctgatga ggaagaggaa aaggaagagg caaagtcagc agagtttgag aagcctgacc
660
ctacaaggaa tccttctaga aaaagaaaga aggagaagaa gaaaaagaaa catagagata
720
ggaagtcac tgactctgac agctcagact ctgagagtga tacaggcaag agggcaaggc
780
acacatcaaa agacagcaag gcagcaaaga agaagaaaaa gaagaagaag cacaagaaga
840
agcacaagga gtgagagtat aaagagtgtg gggggtgggt gagagtaaga aaccaggagc
900
ctcgtgcctt gagactcctg gaaagactca atagtggaga tatagcctcc caccctatta
960
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1020
tcaaaagcag ctgcctgaat gagttgttgt ttccttatca ctctgggtcc ctttgcaagt
1080
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1320
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1620

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1644

<210> 3332

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3332

Met	Asn	Ser	Gly	Arg	Pro	Glu	Thr	Met	Glu	Asn	Leu	Pro	Ala	Leu	Tyr
1				5					10					15	
Thr	Ile	Phe	Gln	Gly	Glu	Val	Ala	Met	Val	Thr	Asp	Tyr	Gly	Ala	Phe
			20					25					30		
Ile	Lys	Ile	Pro	Gly	Cys	Arg	Lys	Gln	Gly	Leu	Val	His	Arg	Thr	His
			35				40					45			
Met	Ser	Ser	Cys	Arg	Val	Asp	Lys	Pro	Ser	Glu	Ile	Val	Asp	Val	Gly
			50			55					60				
Asp	Lys	Val	Trp	Val	Lys	Leu	Ile	Gly	Arg	Glu	Met	Lys	Asn	Asp	Arg
65					70				75					80	
Ile	Lys	Val	Ser	Leu	Ser	Met	Lys	Val	Val	Asn	Gln	Gly	Thr	Gly	Lys
				85					90					95	
Asp	Leu	Asp	Pro	Asn	Asn	Val	Ser	Leu	Ser	Lys	Lys	Arg	Gly	Gly	Gly
			100					105					110		
Asp	Pro	Ser	Arg	Ile	Thr	Leu	Gly	Arg	Arg	Ser	Pro	Leu	Arg	Leu	Ser
			115				120					125			

<210> 3333

<211> 2422

<212> DNA

<213> Homo sapiens

<400> 3333

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120
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180
gctttggagt ttaacctttc tgccaatcca gagtcaagca caatattcca gaggaactct
240
caaacagaag ctttggagtt taacctttct gccaatccag aggcaagcac aatattccag
300
aggaactctc aaacagatgt tgtagaaata agaagaagca actgtacaaa ccatgtatct
360
gctgtgcgtt tcagtcaaca atacagcttg tgttcgacaa tttccttga tgacagcaca
420
gccatccagc attatcttac aatgacaata atatctgtga ccttgagat acctcatcat
480
atcacacaaa gagatgcaga tagaactttg agcatacctg atgaacagtt acactcattt
540
gcggtttcca ccgtgcacat tatgaagaaa agaaatggag gtgggagttt aaataactat
600
tcctcctcca ttccatcgac tcccagcacc agccaggagg accctcagtt cagtgttcct
660

cccactgcca acacacccac ccccgtttgc aagcgggtcca tgcgctgggc caacctgttt
720
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780
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960
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1020
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1080
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1140
cctcatgcta ataaaaagaa acacctaaag aagaaaagca ccaacaactt tatgattgtg
1200
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1260
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1620
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1920
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1980
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2280

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 2400
 aaaaaaaggg aaaaaaaaaa ag
 2422

<210> 3334

<211> 672

<212> PRT

<213> Homo sapiens

<400> 3334

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Ile	Tyr	Glu	Ala	Gly	Ala	Gly	Asp	Arg	Met	Ala	Gly	Ala	Pro	Met	Ala
			20					25					30		
Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp	Leu
			35					40					45		
His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu	Phe
	50					55					60				
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn	Ser
65					70					75				80	
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala	Ser
			85					90					95		
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg	Arg
			100					105					110		
Ser	Asn	Cys	Thr	Asn	His	Val	Ser	Ala	Val	Arg	Phe	Ser	Gln	Gln	Tyr
	115						120				125				
Ser	Leu	Cys	Ser	Thr	Ile	Phe	Leu	Asp	Asp	Ser	Thr	Ala	Ile	Gln	His
	130					135					140				
Tyr	Leu	Thr	Met	Thr	Ile	Ser	Val	Thr	Leu	Glu	Ile	Pro	His	His	
145					150				155					160	
Ile	Thr	Gln	Arg	Asp	Ala	Asp	Arg	Thr	Leu	Ser	Ile	Pro	Asp	Glu	Gln
			165						170					175	
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg	Asn
			180					185					190		
Gly	Gly	Gly	Ser	Leu	Asn	Asn	Tyr	Ser	Ser	Ser	Ile	Pro	Ser	Thr	Pro
		195					200					205			
Ser	Thr	Ser	Gln	Glu	Asp	Pro	Gln	Phe	Ser	Val	Pro	Pro	Thr	Ala	Asn
	210					215					220				
Thr	Pro	Thr	Pro	Val	Cys	Lys	Arg	Ser	Met	Arg	Trp	Ser	Asn	Leu	Phe
225					230					235				240	
Thr	Ser	Glu	Lys	Gly	Ser	His	Pro	Asp	Lys	Glu	Arg	Lys	Ala	Pro	Glu
			245						250					255	
Asn	His	Ala	Asp	Thr	Ile	Gly	Ser	Gly	Arg	Ala	Ile	Pro	Ile	Lys	Gln
			260					265					270		
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys	Lys
	275						280					285			
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser	Ser
	290					295					300				
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu	Gln
305					310					315				320	
Thr	Ser	Thr	Ile	Lys	Val	Pro	Gly	Lys	Trp	Pro	Ser	Leu	Ala	Thr	Ser

					325					330					335	
Ala	Cys	Thr	Pro	Ile	Ser	Ser	Ser	Ser	Lys	Ser	Asn	Gly	Leu	Ser	Lys	Asp
					340				345						350	
Met	Asp	Thr	Gly	Leu	Gly	Asp	Ser	Ile	Cys	Phe	Ser	Pro	Ser	Ile	Ser	
					355			360						365		
Ser	Thr	Thr	Ser	Pro	Lys	Leu	Asn	Pro	Pro	Pro	Ser	Pro	His	Ala	Asn	
						370		375				380				
Lys	Lys	Lys	His	Leu	Lys	Lys	Lys	Ser	Thr	Asn	Asn	Phe	Met	Ile	Val	
385						390				395					400	
Ser	Ala	Thr	Gly	Gln	Thr	Trp	His	Phe	Glu	Ala	Thr	Thr	Tyr	Glu	Glu	
					405				410						415	
Arg	Asp	Ala	Trp	Val	Gln	Ala	Ile	Gln	Ser	Gln	Ile	Leu	Ala	Ser	Leu	
					420			425					430			
Gln	Ser	Cys	Glu	Ser	Ser	Lys	Ser	Lys	Ser	Gln	Leu	Thr	Ser	Gln	Ser	
					435			440					445			
Glu	Ala	Met	Ala	Leu	Gln	Ser	Ile	Gln	Asn	Met	Arg	Gly	Asn	Ala	His	
		450				455					460					
Cys	Val	Asp	Cys	Glu	Thr	Gln	Asn	Pro	Lys	Trp	Ala	Ser	Leu	Asn	Leu	
465					470					475					480	
Gly	Val	Leu	Met	Cys	Ile	Glu	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	
				485					490					495		
Thr	Arg	Leu	Ser	Arg	Val	Arg	Ser	Leu	Glu	Leu	Asp	Asp	Trp	Pro	Val	
				500				505					510			
Glu	Leu	Arg	Lys	Val	Met	Ser	Ser	Ile	Gly	Asn	Glu	Leu	Ala	Asn	Ser	
				515			520					525				
Ile	Trp	Glu	Glu	Ser	Ser	Gln	Gly	Arg	Thr	Lys	Pro	Ser	Val	Asp	Ser	
						530		535			540					
Thr	Arg	Glu	Glu	Lys	Glu	Arg	Trp	Ile	Arg	Ser	Lys	Tyr	Glu	Glu	Lys	
545					550					555					560	
Leu	Phe	Leu	Ala	Pro	Leu	Pro	Cys	Thr	Glu	Leu	Ser	Leu	Gly	Gln	Gln	
				565					570					575		
Leu	Leu	Arg	Ala	Thr	Ala	Asp	Glu	Asp	Leu	Gln	Thr	Ala	Ile	Leu	Leu	
				580				585					590			
Leu	Ala	His	Gly	Ser	Arg	Glu	Glu	Val	Asn	Glu	Thr	Cys	Gly	Glu	Gly	
				595			600					605				
Asp	Gly	Cys	Thr	Ala	Leu	His	Leu	Ala	Cys	Arg	Lys	Gly	Asn	Val	Val	
						610		615			620					
Leu	Ala	Gln	Leu	Leu	Ile	Trp	Tyr	Gly	Val	Asp	Val	Met	Ala	Arg	Asp	
625					630					635					640	
Ala	His	Gly	Asn	Thr	Ala	Leu	Thr	Tyr	Ala	Arg	Gln	Ala	Ser	Ser	Gln	
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<210> 3335

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3335

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120

cccagactgc ttgttgaagg ggttgagggtg ggcttgccgg aaacggggcca gcttctcatc
 180
 atattccata gcatccacc tgcacgcct gccagggccc aggggctcgc agggacagga
 240
 tggccattcc tctagggctg ctggccacgg aagcctggcc gtgggttcgg cacctgctga
 300
 ccgcccctc gcatttgccc tgagacaggg ctggacagcc aggattaccg ctgtgccgag
 360
 tgccgggccc ccatctctct gcgggggtgtg cccagtgagg ccaggcagtg cgactacacc
 420
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 477

<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

Pro	Pro	Pro	Arg	Ile	Cys	Pro	Glu	Thr	Gly	Leu	Asp	Ser	Gln	Asp	Tyr
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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
			20					25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
		35					40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50						55								

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 120
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac
 180
 agacagagac caaaacagaa gcggcaaacg gcaaaaacga agcagaatca atgcaagtta
 240
 gagaaaaaaaa taaaactaaa catcagagca gggaaaagtc atctactccg tatcacacct
 300
 gtgtattagc ttaaccagaa ataagctgga agaggagttc agtagcctct cagcccccta
 360
 aagatgttgg tcatacccc cttttcaccg tctgagtcga gaggacacca agccaaacaa
 420
 actgtgcccc aaactgggtc atctagtcct cccaggtcct tccttgctaa ctcgaggaaa
 480
 caaggaaaac caactttgga tggcaacttc aacaaggtaa ccctccttcc ttcaatggcc
 540
 agactgatgc ccactgacaa tggctttgag atgcttggac agcagactgt catgtcaaga
 600

ctgcccagac cccaccaca ctgtggaaaa gggcagcacc agaccactg gagatgaggc
 660
 tcttgagcca agtgctagc
 679

<210> 3338
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 3338
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 20 25 30
 Lys Glu Val Arg Trp Gly Ser Leu Ser Leu Ala Ser Lys Asp Thr Asp
 35 40 45
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro
 50 55 60
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
 65 70 75 80
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu
 85 90 95
 Arg Ile Thr Pro Val Tyr
 100

<210> 3339
 <211> 1341
 <212> DNA
 <213> Homo sapiens

<400> 3339
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 120
 agaagccagt tccatccagg atccactatc tacacaccta tgttacaaca ttatatcaaa
 180
 tctggtatct gaagaaaaga tacacattta atatgttcat ttaagttacg tattttgcag
 240
 aaagattaaa aattcattca cacaaaactc aaaaactgta ttaaaagttt gaatataaaa
 300
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 360
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 420
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 480
 tgtagtgat gaaacaaaa gaacaaattt gctgcacact gatgccagcg attttcttca
 540
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<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55					60				
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 120

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<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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 35 40 45
 Ile Val Gln Cys Leu Ala Arg Lys Asp Gly Thr Asp Asp Phe Tyr Gln
 50 55 60
 Leu Lys Ile Leu Thr Leu Glu Glu Arg Gly Asp Gln Gly Ile Glu Ser
 65 70 75 80
 Gln Glu Glu Arg Gln Gly Lys Met Leu Leu His Thr Glu Tyr Ser Leu
 85 90 95
 Leu Ser Leu Leu His Thr Gln Asp Gly Val Val His His His Gly Leu

	100		105		110										
Phe	Gln	Asp	Arg	Thr	Cys	Glu	Ile	Val	Glu	Asp	Thr	Glu	Ser	Ser	Arg
	115		120		125										
Met	Val	Lys	Lys	Met	Lys	Lys	Arg	Ile	Cys	Leu	Val	Leu	Asp	Cys	Leu
	130		135		140										
Cys	Ala	His	Asp	Phe	Ser	Asp	Lys	Thr	Ala	Asp	Leu	Ile	Asn	Leu	Gln
145			150		155		160								
His	Tyr	Val	Ile	Lys	Glu	Lys	Arg	Leu	Ser	Glu	Arg	Glu	Thr	Val	Val
	165		170		175										
Ile	Phe	Tyr	Asp	Val	Val	Arg	Val	Val	Glu	Ala	Leu	His	Gln	Lys	Asn
	180		185		190										
Ile	Val	His	Arg	Asp	Leu	Lys	Leu	Gly	Asn	Met	Val	Leu	Asn	Lys	Arg
	195		200		205										
Thr	His	Arg	Ile	Thr	Ile	Thr	Asn	Phe	Cys	Leu	Gly	Lys	His	Leu	Val
	210		215		220										
Ser	Glu	Gly	Asp	Leu	Leu	Lys	Asp	Gln	Arg	Gly	Ser	Pro	Ala	Tyr	Ile
225			230		235		240								
Ser	Pro	Asp	Val	Leu	Ser	Gly	Arg	Pro	Tyr	Arg	Gly	Lys	Pro	Ser	Asp
	245		250		255										
Met	Trp	Ala	Leu	Gly	Val	Val	Leu	Phe	Thr	Met	Leu	Tyr	Gly	Gln	Phe
	260		265		270										
Pro	Phe	Tyr	Asp	Ser	Ile	Pro	Gln	Glu	Leu	Phe	Arg	Lys	Ile	Lys	Ala
	275		280		285										
Ala	Glu	Tyr	Thr	Ile	Pro	Glu	Asp	Gly	Arg	Val	Ser	Glu	Asn	Thr	Val
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Cys	Leu	Ile	Arg												
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<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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<210> 3344
 <211> 143
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
 50 55 60
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
 65 70 75 80
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
 85 90 95
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
 100 105 110
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 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
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<210> 3345
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 <212> DNA
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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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		20						25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
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Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85						90					95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100						105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115						120					125			
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	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145					150					155					160
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165						170					175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180						185					190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
	195						200						205		
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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<210> 3347

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 3347

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 <211> 288
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala
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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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<211> 174
<212> PRT
<213> Homo sapiens

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Gln Gly Leu Ala Val Tyr Ala Ser Pro Glu Asn Lys Lys Leu Phe Glu
35 40 45
Glu Glu Lys Leu Leu Arg Gln Glu Gly Lys Leu Glu Lys Ile Gln Thr
50 55 60
Lys Ala Gly Glu Ala Thr Val Lys Phe Leu Lys Ser Cys Arg Leu Glu
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Val Gly Met Lys Asn Asn Val Lys Trp Glu Leu Asn Pro Glu Ile Val
85 90 95
Ala Arg His Phe Phe Lys Asn Leu Gly Val Val Val Ala Pro His Thr
100 105 110
Leu Lys Leu Pro Ala Glu Pro Ile Thr Arg Trp Gly Glu Tyr Trp Cys
115 120 125
Glu Val Thr Val Asn Gly Leu Asp Thr Val Arg Val Pro Met Ser Val
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145 150 155 160
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<210> 3351
<211> 1422
<212> DNA
<213> Homo sapiens

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 540
 cccggtgttg gagtgtgctg cctcctggct tcagcggacg cccgtggttt actgtgtgag
 600
 gttagccaag gcccttgtag atgactactg ctgtttggtg ccgggatcca ttcagacgct
 660
 gaagcagata ttcagtgcc acccagagatt ctgctgccag ttcacacact ccgttaccgc
 720
 gctctatgac ctgtcatcag atgacctcat tccacctatg gacttgcttg aaatgattgt
 780
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 840
 ggccaatctg ccaataggat tcttagagct caccgccgctc gttggattga tccgctgggtg
 900
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 960
 cagcaacaag gtcacaaagg acccgggcgt ggggatggac agagactccc acctcttgta
 1020
 ctcaaaactc cacctcagcg tcctgcaagt gctcatgacg ctgcagctgc acctgaccga
 1080
 gaagaatctg tatgggcgcc tggggctgat cctcttcgac cacatgggtcc cgctggtaga
 1140
 ggagatcaac aggttggcgg atgaactgaa cccctcaac gcctcccagg agattgagct
 1200
 ctgcgtggac cggtcggcgc aggtctctga ggtggccatg gcctcaggag ctctgctgtg
 1260
 cagcagagat gaccttagaa cttgtttctc caggctcccc cgtaataacc tcctccagct
 1320
 ggtgatctcg ggtcccgtgc agcagtcgcc tcacgccgcg ctccccccgg ggttctaccc
 1380
 ccacatccac acgccccgc tgggctacgg ggctgtcccc cc
 1422

<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile
 1 5 10 15
 Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

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      20      25      30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
      35      40      45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
      50      55      60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65      70      75      80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
      85      90      95
Ser

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<210> 3353
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 3353
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120
ggctccctac ctgacctcac caacctgcac tttccccac cactgcccac cccctggac
180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgaccac
240
accatgactc acctgggcat cagcaggggc atgggcctgg gcccaggcta tgatgcacca
300
ggcggtcccc ctggatacca gtaaactgtc cactgaccag cggttacccc catacccata
360
cagttcccca agtttggtnt ctgcttacct agccccacac cccaaagttt taacagcagc
420

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<210> 3354
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 3354
Xaa Lys Leu Ser Ser Ser Ser Arg Pro Arg Ser Cys Glu Val Pro
1      5      10      15
Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20      25      30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35      40      45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50      55      60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65      70      75      80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85      90      95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100      105

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<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3355
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 gtaagattat ctccagccaa aatgtcaacc aagaattcta cagatctagt tgaatatgtt
 120
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagaggtca gctagaagac
 180
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag
 240
 gaggacatct ctgcttgctt gcagggggacc catggctttc gaaaagagga atcgctcgcc
 300
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac
 420
 tttgcagtac acgagataaa catcaaacac ctacaaggag ttgggagatc tttc
 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
 Met Ser Thr Lys Asn Ser Thr Asp Leu Val Glu Tyr Val Asp Lys Ser
 1 5 10 15
 His Ala Phe Leu Pro Ile Ile Pro Asn Thr Gln Arg Gly Gln Leu Glu
 20 25 30
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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 60
 agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg
 120
 agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga
 180
 aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttggtcca cttgaatgat
 240
 tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg
 300
 cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggccctctgcg
 360
 gtgtcgggtgc tgctgggtggc ggcggagagg aaccgggtggc atcgtctccc gagcctgctc
 420
 ctgccgccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga
 480
 agaaacatta ccaaggtgat cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc
 540
 acagccaaaa aactgggtgt acagactgtg gcggtttata gtgaggctga cagaaattcc
 600
 atgcatgtag atatggcaga tgaagcatat tccatcggcc ccgctccctc ccagcagagc
 660
 tacctatcta tggagaaaat cattcaagtg gccaaagacct ctgctgcaca ggctatccat
 720
 ccaggatgcg gttttctttc agaaaacatg gaatttgctg aactttgtaa gcaagaagga
 780
 attattttta taggcctctc tccatctgca attagagaca tgggtataaa gagcacatcc
 840
 aaatccataa tggctgctgc tggagtacct gttgtggagg gttatcatgg tgaggaccaa
 900
 tcagaccagt gcctgaagga acacgccagg agaattggct atcctgtcat gattaaagcc
 960
 gtccgggggtg gaggaggaaa aggaatgagg attgttagat cagaacaaga atttcaagaa
 1020
 cagttagagt cagcacggag agaagctaag aagtctttca atgatgatgc tatgctgac
 1080
 gagaagtttg tagacacacc gaggcagtga gaagtccagg tgtttggtga tcaccatggc
 1140
 aatgctgtgt acttgtttga aagagactgt agtgtgcaga ggcgacatca gaagatcatt
 1200
 gaggaggccc cagcgcttgg tattaatct gaagtaagaa aaaagctggg agaagctgca
 1260
 gtcagagctg ctaaagctgt aaattatgtt ggagcagggg ctgtggagtt tattatggac
 1320
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 1380
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 1440
 aagattcctt tgagccagga agaaataact ctgcagggcc atgccttcga agctagaata
 1500
 tatgcagaag atcctagcaa taacttcatt cctgtggcag gccattagt gcacctctct
 1560
 actcctcgag cagacccttc caccaggatt gaaactggag tacggcaagg agacgaagtt
 1620

tccgtgcatt atgaccccat gattgcgaag ctggtcgtgt gggcagcaga tcgccaggcg
 1680
 gcattgacaa aactgaggta cagccttcgt cagtacaata ttgttggaact gcacaccaac
 1740
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 1800
 gatttcatcc ctcaacacca caaacagttg ttgctcagtc ggaaggctgc agccaaagag
 1860
 tctttatgcc aggcagccct gggctctatc ctcaaggaga aagccatgac cgacactttc
 1920
 actcttcagg cacatgatca attctctcca ttttcgtcta gcagtggag aagactgaat
 1980
 atctcgtata ccagaaacat gactcttaaa gatggtaaaa acagttttcg tctcctcgga
 2040
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 2100
 ttccagacca ctacaataaa atgtagccat agctgtaacg tataaccatg atgggtctta
 2160
 tagcatgcag attgaagata aaactttcca agtccttggt aatctttaca gcgagggaga
 2220
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 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35					40					45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65					70				75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115					120					125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145					150				155					160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180				185						190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

```

      195              200              205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu
  210              215              220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val
  225              230              235              240
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His
      245              250              255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro
      260              265              270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg
      275              280              285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu
      290              295              300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn
  305              310              315              320
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg
      325              330              335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu
      340              345              350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala
      355              360              365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln
      370              375              380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu
  385              390              395              400
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile
      405              410              415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Lys
      420              425              430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala
      435              440              445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe
      450              455              460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met
  465              470              475              480
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly
      485              490

```

<210> 3359

<211> 652

<212> DNA

<213> Homo sapiens

<400> 3359

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gcctatacct actgtagctt ctccacgtat ggaccctaaa ggctactgct gctactacgg
120
ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180
gggaggtaat taaaaaacag tggaatggaa aaacagtgcg gtagtcaccc tgtaatatgc
240
tccttgtaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
300

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cgcatcttac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact
 360
 actgtgaatg tgtgctcaga actggtgaag ctagttttct gtgtgcttgt gtcattctgt
 420
 gttataaaga aagatcatca aagtagaaat ttgaaatatg cttctctggaa ggaattctct
 480
 gatttcatga agtgggtccat tcttgccctt ctttatttcc tggataactt gattgtcttc
 540
 tatgtcctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata
 600
 acaacagctc ttctattcag gatagtgtg aagaggcgctc taaactggat cc
 652

<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
1				5					10					15	
Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35					40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115					120					125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 120
 ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc ccgggtctgt
 180
 gatcgccgag gcgggagtga agatagtcca agtcctaaga gacagcgcct ctctcattca
 240

gtctttgatt atacatcagc atcaccagct ccctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagccccc ttcagttcga ccaagccaac atcacttctc aggggaacga
 360
 tgcaacacac ctgcacgcaa cagaagaagt cctcctgtca ggcgccagag aggaagaagg
 420
 gatcgtctgt ctgcacataa ttccattagt caagatgaaa actatcacca tctcccttac
 480
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt
 540
 ctgctacatc ctgctgctca tccaccccag cagaatgcag tcatgggtga catacatgat
 600
 cagctccatc aaggaacagt ccctgtttct tacacagtaa caacagtggc accacatggg
 660
 attccactct gcacaggcca gcacatccct gctttagta cacagcaggt cccaggatgc
 720
 tctgtggttt tcagtggaca gcacctccct gtctgtagtg tgctcctcc aatgcttcag
 780
 gcatgttcag ttcagcactt accagtacca tatgctgcat tcccaccct tatttctagt
 840
 gatccatttc ttatacatcc tctcacctt tctcccatc atcctcctca tttgccacca
 900
 ccaggccagt ttgtcccttt ccaaacacag caatcacgat cgcctctgca aaggatagaa
 960
 aatgaagtgg aactcttagg agaacatctt ccaggagccc acccccagca ccccatctg
 1020
 ttaataaata tctcaactcc
 1040

<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
			50			55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70				75					80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85				90					95		
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105						110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Val	Ala	Pro	His	Gly	Ile	Pro	
			115			120					125				
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
			130			135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

```

145          150          155          160
Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro
          165          170          175
Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His
          180          185          190
Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Pro Gly
          195          200          205
Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg
          210          215          220
Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His
225          230          235          240
Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr
          245          250

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<210> 3363
 <211> 718
 <212> DNA
 <213> Homo sapiens

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<400> 3363
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120
gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggccgaac aacatctaaa cagaccactt ccaatacage
240
cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
300
aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
360
aatcagtga tgtacaacc agccgagggg acggtgcata actctccatc agaagccctg
420
gggttccttg ccccccgtga gccgcaggag gatgcgttgc ctgcagtgca gacggccgtg
480
agctctgggc aaacctaaac agagaccagt gtcccatgct ctttcttctt ggagcctgtc
540
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600
ttccccaaag agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
660
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718

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<210> 3364
 <211> 163
 <212> PRT
 <213> Homo sapiens

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<400> 3364
Met Gly His Trp Ser Leu Phe Arg Phe Ala Gln Ser Ser Arg Pro Ser
1          5          10          15
Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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900
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc
960
tgtgtgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa
1020
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa
1080
gaaaagttat ttccacatgt gacaccaaaa ggaattaatg gtatagactt taaaggggaa
1140
gcgataactt ttaaagcaac tactgctgga atccttgcaa cactttctca ttgtattgaa
1200
ctaattggta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa
1260
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt
1320
ggaggaccag attatgagga aggcctaac agtctgatta atgaagaaga gttctttgat
1380
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1440
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1500
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1620
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1680
ggagaaatga aggtatacag aagagaagta gaagaaaatg ggattgttct ggatccttta
1740
aaagctaccc atgcagttaa aggcgtcaca ggacatgaag tctgcaatta tttctggaat
1800
gttgacgttc gcaatgactg ggaaacaact atagaaaact ttcattgtggg ggaaacatta
1860
gctgataatg caatcatcat ttatcaaaca cacaagaggg tgtggcctgc ttctcagcga
1920
gacgtattat atctttctgt cattcgaaag ataccagcct tgactgaaaa tgaccctgaa
1980
acttgatag tttgtaattt ttctgtggat catgacagtg ctctctctaaa caaccgatgt
2040
gtccgtgcc aataaaatgt tgctatgatt tgtcaaacct tggtaagccc accagagggg
2100
aaccaggaaa ttagcaggga caacattcta tgcaagatta catatgtagc taatgtgaac
2160
cctggaggat gggcaccagc ctcatgttta agggcagtgg caaagcgaga gtatcctaaa
2220
tttctaaaac gttttacttc ttacgtccaa gaaaaaactg caggaaagcc tattttgttc
2280
tagtattaac aggtactaga agatatgttt tatctttttt taactttatt tgactaatat
2340
gactgtcaat actaaaattt agttgttgaa agtatttact atgtttttt
2389

<210> 3366

<211> 624

<212> PRT

<213> Homo sapiens

<400> 3366

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Met Ser Asp Asn Gln Asn Trp Asn Ser Ser Gly Ser Glu Glu Asp Pro
 1           5           10           15
Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
      20           25           30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
      35           40           45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
      50           55           60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65           70           75           80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
      85           90           95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
      100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
      115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
      130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145          150          155          160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
      165          170          175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
      180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
      195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
      210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225          230          235          240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
      245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
      260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
      275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
      290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305          310          315          320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
      325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
      340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
      355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
      370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

```

```

385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
610          615          620

```

<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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acgcgtgcag gagaggagag gccaggagat agggaggggca gtttgtggat tgaaatgacc
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gagaattacg ccacagaggt gttggaggct ggcacgtgg catctcagga gcacggaggg
120
tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
300
cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctggt tccttcaggc
360
accagg
366

```

<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

```

Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1             5             10             15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
      20             25             30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
      35             40             45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
      50             55             60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65             70             75             80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
      85             90             95
Thr Leu Phe Pro Ser Gly Thr Arg
      100

```

<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

```

cttgttccag ggaaaagctt tcagcagcaa agggaagcca tgaaacaaac catagaagaa
60
gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aaggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgctg cagaggctca tgaacaaaga aaaggaccgc
300
tttgcattctg cagttcctca tacaaccgag agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttcgtaaac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaacatc cattctgtgg catgttggac
840
ttgatctggc aaaaactgcc aataggagga ctgcccagca ctgcagcaag attgaggata
900

```

agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac
 960
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggctttagcg
 1020
 gttcttgccct cattttggga ttctaaatgg aagctttcaa cagagcattc cattttgtcc
 1080
 tgttaaaacc ttttgttttc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac
 1140
 ttgtatacac aagcgtccat gtctcacaca aatattgatg tgattattct taagtgttaa
 1200
 atcattaaca cttaaagac ttcatggga atattgagca gagggactgt gcttctatgc
 1260
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttctctaa
 1320
 aaggaaaaat aaaaaacaaa atgggtgccac tttgggttga agctactttg ttaggcttga
 1380
 attcatttat atgtcttttg attct
 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

Leu	Val	Pro	Gly	Lys	Ser	Phe	Gln	Gln	Gln	Arg	Glu	Ala	Met	Lys	Gln
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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
		20						25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50					55				60					
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70					75				80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90					95		
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
		100						105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115					120					125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
		130				135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145					150					155				160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170					175		
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180					185					190			
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195					200					205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser


```

225                230                235                240
Asp Leu Asp Lys Ala Tyr Gln Glu Leu Leu Arg Leu Ile Asn Lys Leu
                245                250                255
Asp Thr Glu Pro Gln Trp Val Pro Ser Thr Trp Leu Arg
                260                265

```

```
<210> 3371
<211> 790
<212> DNA
<213> Homo sapiens
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<400> 3371
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60
gacagaccag agactccagt caccctcgcc atctgtggaa tcatattctg gctgatcttt
120
ggtttcaaaa gtccggtggc ctgggggctgt atgggtcccac cccctggggg ggttgaggaa
180
gttgctgtcg tctgaggtac tgccgtacgt gtagtcctgg tccccgcttt tgccctggcc
240
aaagaagcac caagggagca tctggaccac caggctgcac accaaccctt cccagaccg
300
cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc
360
cttgatctac caaactttcc agatctttcc aaagctgata tcaatgggca gaatccaaat
420
atccaggtca ccatagaggt ggtcgacggg cctgactctg aagcagataa agatcagcat
480
ccggagaata agcccagctg gtcagtccca tcccccgact ggcgggcctg gtggcagagg
540
tcctgtcctt tggccagggc aaacagcggg gaccaggact acaagtacga cagtacctca
600
gacgacagca acttcctcaa cccccccagg ggggtgggacc atacagcccc agggccaccg
660
acttttgaaa ccaaagatca gccagaatat gattccacag atggcgaggg tgactggagt
720
ctctggtctg tctgcagcgt cacctgcggg aacggcaacc agaaacggac ccggtcttgt
780
ggctacgcgt
790

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<210> 3372
<211> 198
<212> PRT
<213> Homo sapiens
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<400> 3372
Gly Thr Ala Val Arg Val Val Leu Val Pro Ala Phe Ala Leu Ala Lys
  1             5             10             15
Glu Ala Pro Arg Glu His Leu Asp His Gln Ala Ala His Gln Pro Phe
          20             25             30
Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg
          35             40             45
Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

```

50 55 60
 Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile
 65 70 75 80
 Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro
 85 90 95
 Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp
 100 105 110
 Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp
 115 120 125
 Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro
 130 135 140
 Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys
 145 150 155 160
 Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu
 165 170 175
 Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr
 180 185 190
 Arg Ser Cys Gly Tyr Ala
 195

<210> 3373

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3373

tgtacatggt ttctctgggc tgacaggggc cctgcccctg gggcactgag ccctccctgt
 60
 gggtcctcga acagaagcca gggctctgtgc ggcacccacc agctgctggg ccatggcgga
 120
 gtgttctggt gcgggccagc gctgaccgg tgcgggcggc ctcaggagag gagagcttgc
 180
 tcagtgcgtc acgtagtcag ggctcaggct ggggcccggc tccagagcct ggtcacattc
 240
 ccaagcttca ttctcttcac ctgtgaattg caggcttccc tgggtgtgcc tgcacatgag
 300
 ggaagacaca cctgaagcac tgggtccctc catggccttg ggccgcagga accgtgggcg
 360
 cagagcttg ggaaggacat gtcggaggcc ggcgcctgtg cgggcagaag ctgtgtcctc
 420
 cagcccttcc accaccagca tggtctcatt tccaggtttc tctgtttaaa aaacaaaagt
 480
 agcgcacatcgg tggctcttcac gacgtacacc cagaagcacc cgtccatcga ggacgggcct
 540
 ccgtttgtgg agccgctgct taacttcac tggttcctgc tgctggctgt ggacgggtgc
 600
 gtcttgggat cctgcagggg gagggggctg tgaatgtgcg ggttgtgtgt agacgtgggt
 660
 tggatagctg tgtgggtgtg tgtgcaagt tagccatggt gtgggtagcc gtgtgggtat
 720
 atgcat
 726

<210> 3374

<211> 84

<212> PRT

<213> Homo sapiens

<400> 3374

```

Met Ser Glu Ala Gly Ala Cys Ala Gly Arg Ser Cys Val Leu Gln Pro
 1           5           10           15
Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn
      20           25           30
Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
      35           40           45
Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
      50           55           60
Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
65           70           75           80
Gly Arg Gly Leu

```

<210> 3375

<211> 393

<212> DNA

<213> Homo sapiens

<400> 3375

```

acgcgtgcat acgtgatctc atgtttgcac acatgtgtcc atgcagatgc atgctctcac
60
gcacatgtgc ccacacactc agcactcaca ccccgctctg caggctcagc cccactcctg
120
agccacctgc ctgggctttg ggggccagc cggcattggg agccccaggc tccagctggc
180
ctcgtttggc tctgaaatct aggccaggat gcagagcccg cagtgcggcc agtggagccc
240
ctgggtactgt ggcagagcccc cacctggcag ccccttttcc tgtcaaagcc cctcccagcg
300
tcctctcccc accaggcaag ctaccgcgtt gaggettagg acgttgcgcc ctctgtgtc
360
cttgcccagc atccccggcc tgcattctac cag
393

```

<210> 3376

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3376

```

Met Phe Ala His Met Cys Pro Cys Arg Cys Met Leu Ser Arg Thr Cys
 1           5           10           15
Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr
      20           25           30
Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala
      35           40           45
Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
      50           55           60
Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

```

```

65          70          75          80
His Leu Ala Ala Pro Phe Pro Val Lys Ala Pro Pro Ser Val Leu Ser
          85          90          95
Pro Pro Gly Lys Leu Pro Ala
          100

```

```
<210> 3377
<211> 5235
<212> DNA
<213> Homo sapiens
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```

<400> 3377
ngtcgacatc ttggtctccg gtcttggggc tgtttaagaa tcctggcatc acgtgtggcg
60
aggacatggc tgatcagttt tctgacagaa gtgggtaaat ttccgcgttg gtaaatttcc
120
tgacaggaaa tttcggggaa ctaaaaaggc tggaagaaca tgaagatgga gcagtcataa
180
accaccact caaggaccat ctccctcacg accatccaca cgagactcag attgtctgaa
240
ttgagctatc gcaacttaat gctaaaagct ccttaaagct acagatttat gacatagttc
300
cttccaaaat attacatcat aaatcattga gaagattaaa aaaaaacact tgaagaaatt
360
gtagttttaa acatctctgc atatattttg gatagctact aggttacttt aactgtcatt
420
aaggagcaca gacttactga agctttactg gacagaatcc tgggaaatcg atatcattat
480
aaggttatat ttcccagtta gcgggtgaag ggctggagac cttattgcag tcatggcttt
540
cacaaattac agcagctctga atcgagctca gctaaccttt gaatatctgc acacaaattc
600
gtaagtatcc tctaggtgcc actgaggtaa ccagtaactc gttccttgat attatatgga
660
aatcgtttcc ccagaaaatt ttgctttttc actttttgag atgtatccca ctggagtga
720
atgtgtcact ggatatcttg agctctgtat tgaagaactg agatcagtga aatacttggt
780
gctaataccag aagaatctga tttttgttta ttggatcaaa attttctaaa tgcaaaacttt
840
agttatttga agtcaatatg ttgagttggt tcattcaagt gtttatagga atccaacaaa
900
tactgtctta ttggatcgcc aaatgttgga ctattttagt atcaaccggt tcccctctgt
960
agtgacaacg tcctaaacag ttaggtttat aacaagtgtt tactttctaa caagaaaaca
1020
gaagacattt aaatgacaac tttcaagaag aaaattttta ttttttcaga agttggcatt
1080
atcttctctg cagattgctc acatccaata ttatttgtat atgctaataa ggaaacggca
1140
acttgtttat atctctattt agatagtctt tccccaaaat ttccacagaa acatacagtg
1200
tcatgggttc ttgagttcat gaaggagtaa tctaatactt ccaacatggt ctggaatggt
1260

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tcagggtttaa tccatatgcc cactctcttg gaggctgtcc agtagcgtca aaacttttagt
1320
gttttaatac attcacctgt tacttttgag atgaagttca cctttcttg atcacatgca
1380
aaggatgttt aggtctgtga agaaaagaat ttctaggccg ggtgctgtgg ctcacgcctg
1440
taatcccagc actttgggag gccgagaacc actcacgaat tcttgtttg tgctcttgct
1500
gaactgggtg ataatgcaag agatgctgat gccaccagaa tagatattha tgcagaaaga
1560
cgagaggacc ttcgaggagg atttatgctt tgcttttttg atgatggagc aggaatggat
1620
ccaagtgatg ctgccagtgt gatccagttt gggaagtcgg ccaagcgaac acctgagtct
1680
actcagattg ggcagtacgg gaatgggtta aaatcgggct caatgcgcat tgggaaggat
1740
ttatcctgt tcaccaagaa ggcagacacc atgacctgcc tcttctgtc tcgcacgtt
1800
catgaggaag aaggcattga tgaagtata gtccactgc ccacctgga tgcctggacc
1860
cggaacctg tcacagacaa ttagagaaa ttgacctg agacagaact catctataag
1920
tactctccat tccgactga ggaggaagt atgacctg ttatgaagat tctggggac
1980
agcgaacat tggatgatc cttcaatct aaactcatg ataatggaga gccagaacta
2040
gacataatct caaatccaag agatatccag atggcagaga cgtccccaga gggcacgaag
2100
ccagagcggc gctcgttccg tgcctatgcc gctgtgctct atattgatcc ccggatgagg
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2220
aggatgtaca agtacacgtc aagccgtttc aagacctg cgagcagga ggtgaggata
2280
gcagtgcacg tagcaaggat tgctgaagag aaggcgcggg aggcagagag caaagctcgg
2340
acattagaag tacgcctagg tggagacctc acgcgggact ccagggtgat gttgcgacag
2400
gtccagaaca gagccatcac tctgcgcaga gaagccgat tcaagaagag gatcaaggag
2460
gccaagcagc gagcacttaa agaacctaa gaactgaatt ttgttttttg tgtcaacatt
2520
gaacaccggg atctggatgg catgttcatc tacaactgta gccgactgat caaatgtat
2580
gagaaagtgg gccacagct ggaagggggc atggcatgtg gcggggtgt tggggtgtt
2640
gatgtgccct acctggtcct ggagcctaca cacaacaaac aggactttgc tgatgccaa
2700
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2760
gccatcgccc agaggggaat catcaagttc tgggatgagt ttggctacct ctctgccaac
2820
tggaaccagc ccccgctccg tgagctgcgt tacaacgcc ggagagctat ggaaatcccc
2880

accaccatcc agtgcgattt gtgtctgaaa tggagaaccc tccccttcca gctgagttct
2940
gtggaaaaag attaccctga cacctgggtt tgctccatga accctgatcc tgaacaggac
3000
cgggtgtgagg cttctgaaca aaagcagaag gttccccctgg gaacattcag aaaggacatg
3060
aagacgcagg aagagaagca gaaacaactg acagagaaaa ttcgccagca gcaggagaag
3120
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3180
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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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			20					25					30		
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
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Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
		50				55					60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
65				70					75					80	
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85					90					95		
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
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Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
		115				120					125				
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		130				135					140				
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Ser	Phe	Arg	Ala	Tyr	Ala	Ala	Val	Leu	Tyr	Ile	Asp	Pro	Arg	Met	Arg
			180					185					190		
Ile	Phe	Ile	His	Gly	His	Lys	Val	Gln	Thr	Lys	Arg	Leu	Ser	Cys	Cys
			195				200					205			
Leu	Tyr	Lys	Pro	Arg	Met	Tyr	Lys	Tyr	Thr	Ser	Ser	Arg	Phe	Lys	Thr
			210			215					220				
Arg	Ala	Glu	Gln	Glu	Val	Arg	Ile	Ala	Val	His	Val	Ala	Arg	Ile	Ala
225					230					235					240
Glu	Glu	Lys	Ala	Arg	Glu	Ala	Glu	Ser	Lys	Ala	Arg	Thr	Leu	Glu	Val
				245					250					255	
Arg	Leu	Gly	Gly	Asp	Leu	Thr	Arg	Asp	Ser	Arg	Val	Met	Leu	Arg	Gln
			260					265					270		
Val	Gln	Asn	Arg	Ala	Ile	Thr	Leu	Arg	Arg	Glu	Ala	Asp	Val	Lys	Lys
			275				280					285			
Arg	Ile	Lys	Glu	Ala	Lys	Gln	Arg	Ala	Leu	Lys	Glu	Pro	Lys	Glu	Leu
			290			295					300				
Asn	Phe	Val	Phe	Gly	Val	Asn	Ile	Glu	His	Arg	Asp	Leu	Asp	Gly	Met
305					310					315					320
Phe	Ile	Tyr	Asn	Cys	Ser	Arg	Leu	Ile	Lys	Met	Tyr	Glu	Lys	Val	Gly
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Pro	Gln	Leu	Glu	Gly	Gly	Met	Ala	Cys	Gly	Gly	Val	Val	Gly	Val	Val
			340					345					350		
Asp	Val	Pro	Tyr	Leu	Val	Leu	Glu	Pro	Thr	His	Asn	Lys	Gln	Asp	Phe
			355				360					365			
Ala	Asp	Ala	Lys	Glu	Tyr	Arg	His	Leu	Leu	Arg	Ala	Met	Gly	Glu	His
			370			375					380				
Leu	Ala	Gln	Tyr	Trp	Lys	Asp	Ile	Ala	Ile	Ala	Gln	Arg	Gly	Ile	Ile
385					390					395					400
Lys	Phe	Trp	Asp	Glu	Phe	Gly	Tyr	Leu	Ser	Ala	Asn	Trp	Asn	Gln	Pro
				405					410					415	
Pro	Ser	Ser	Glu	Leu	Arg	Tyr	Lys	Arg	Arg	Arg	Ala	Met	Glu	Ile	Pro
			420					425					430		
Thr	Thr	Ile	Gln	Cys	Asp	Leu	Cys	Leu	Lys	Trp	Arg	Thr	Leu	Pro	Phe
			435				440					445			
Gln	Leu	Ser	Ser	Val	Glu	Lys	Asp	Tyr	Pro	Asp	Thr	Trp	Val	Cys	Ser
			450			455					460				
Met	Asn	Pro	Asp	Pro	Glu	Gln	Asp	Arg	Cys	Glu	Ala	Ser	Glu	Gln	Lys
465					470					475					480
Gln	Lys	Val	Pro	Leu	Gly	Thr	Phe	Arg	Lys	Asp	Met	Lys	Thr	Gln	Glu
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Glu	Lys	Gln	Lys	Gln	Leu	Thr	Glu	Lys	Ile	Arg	Gln	Gln	Gln	Glu	Lys
				500				505					510		
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			515												


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Pro Glu Ala Pro Arg Lys Pro Ala Asn Thr Leu Val Lys Thr Ala Ser
  610              615              620
Arg Pro Ala Pro Leu Val Gln Gln Leu Ser Pro Ser Leu Leu Pro Asn
625              630              635              640
Ser Lys Ser Pro Arg Glu Val Pro Ser Pro Lys Val Ile Lys Thr Pro
      645              650              655
Val Val Lys Lys Thr Glu Ser Pro Ile Lys Leu Ser Pro Ala Thr Pro
      660              665              670
Ser Arg Lys Arg Ser Val Ala Val Ser Asp Glu Glu Glu Val Glu Glu
      675              680              685
Glu Ala Glu Arg Arg Lys Glu Arg Cys Lys Arg Gly Arg Phe Val Val
      690              695              700
Lys Glu Glu Lys Lys Asp Ser Asn Glu Leu Ser Asp Ser Ala Gly Gly
705              710              715              720
Glu Asp Ser Ala Asp Leu Lys Arg Ala Gln Lys Asp Lys Gly Leu His
      725              730              735
Val Glu Val Arg Val Asn Arg Glu Trp Tyr Thr Gly Arg Val Thr Ala
      740              745              750
Val Glu Val Gly Lys His Val Val Arg Trp Lys Val Lys Phe Asp Tyr
      755              760              765
Val Pro Thr Asp Thr Thr Pro Arg Asp Arg Trp Val Glu Lys Gly Ser
      770              775              780
Glu Asp Val Arg Leu Met Lys Pro Pro Ser Pro Glu His Gln Ser Leu
785              790              795              800
Asp Thr Gln Gln Glu Gly Gly Glu Glu Glu Val Gly Pro Val Ala Gln
      805              810              815
Gln Ala Ile Ala Val Ala Glu Pro Ser Thr Ser Glu Cys Leu Arg Ile
      820              825              830
Glu Pro Asp Thr Thr Ala Leu Ser Thr Asn His Glu Thr Ile Asp Leu
      835              840              845
Leu Val Gln Ile Leu Arg Asn Cys Leu Arg Tyr Phe Leu Pro Pro Ser
      850              855              860
Phe Pro Ile Ser Lys Lys Gln Leu Ser Ala Met Asn Ser Asp Glu Leu
865              870              875              880
Ile Ser Phe Pro Leu Lys Glu Tyr Phe Lys Gln Tyr Glu Val Gly Leu
      885              890              895
Gln Asn Leu Cys Asn Ser Tyr Gln Ser Arg Ala Asp Ser Arg Ala Lys
      900              905              910
Ala Ser Glu Glu Ser Leu Arg Thr Ser Glu Arg Lys Leu Arg Glu Thr
      915              920              925
Glu Glu Lys Leu Gln Lys Leu Arg Thr Asn Ile Val Ala Leu Leu Gln
      930              935              940
Lys Val Gln Glu Asp Ile Asp Ile Asn Thr Asp Asp Glu Leu Asp Ala
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Tyr Ile Glu Asp Leu Ile Thr Lys Gly Asp
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<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

Xaa	Ile	Trp	Ala	Glu	Thr	Arg	Leu	Val	Leu	Met	Ala	Thr	Asp	Arg	Gly
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			20						25					30	
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
			35				40						45		
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
			50			55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70				75					80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
				85					90					95	
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
			100					105					110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

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Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser
145              150              155              160
Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr
      165              170              175
His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly
      180              185              190
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser
      195              200              205
Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val
      210              215              220
Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp
225              230              235              240
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu
      245              250              255
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala
      260              265              270
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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660
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780

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<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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Ala	Thr	Glu	Gln	Glu	Pro	Leu	Glu	Gly	Thr	Glu	Gln	Thr	Leu	Asp	Ala
			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
		35				40					45				
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
	50				55					60					
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
65				70					75					80	
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
			85					90					95		
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
			100					105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
	115					120					125				
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
	130				135					140					
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150					155					160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165					170					175		
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
		180						185				190			
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
	195					200					205				
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210		215		220
Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg				
225		230		235
Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu				240
	245		250	
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly				255
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<210> 3383

<211> 309

<212> DNA

<213> Homo sapiens

<400> 3383

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120
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180
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300
agaaagccc
309

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<210> 3384

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3384

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	20		25	
Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala				30
	35		40	
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr				45
	50		55	
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg				60
65		70		75
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser				80
	85		90	

<210> 3385

<211> 720

<212> DNA

<213> Homo sapiens

<400> 3385

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 120
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 240
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 360
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 420
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 480
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<210> 3386

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
			35				40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
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Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
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Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
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Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
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Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
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185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser	Ser
			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35					40					45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
50						55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85					90					95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
	130					135					140				
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145					150										

<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 180
 gacggggaac cttctgacca gcctcatggg ctctcagag caggaggatg gggaggagag
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cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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20 25 30
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro
35 40 45
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro
50 55 60
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu
65 70 75 80
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His
85 90 95
Val Glu Thr Pro Arg Ser
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<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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120
tttgcagact tagaagatgg ctttaatttc caaggaacca ggcggcgata ctacagacat
180
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240
tgtgtccttc agcttggaga tatcatcgat ggatataatg cacagtataa tgcattccaa
300
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360
tggggaaacc atgaattcta taacttcagt agagagtatt taacacactc taaacttaac
420
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480
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720

ttctctgaca caaaccaaga aaaggtggtg attgtgagcc atcttcccat ttacccggac
 780
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 1080
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 1200
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 1260
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 1295

<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser	20	25	30	
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe	35	40	45	
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His	50	55	60		
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys	65	70	75	80
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr	85	90	95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg	100	105	110	
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn	115	120	125	
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu	130	135	140	
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr	145	150	155	160
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu	165	170	175	
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys	180	185	190	
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu	195	200	205	
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn				

210		215		220
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr				
225		230		240
Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro				
	245		250	255
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg				
	260		265	270
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe				
	275		280	285
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val				
	290		295	300
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln				
305		310		320
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly				
	325		330	335
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala				
	340		345	350
Phe His Cys				
355				

<210> 3393
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 3393
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 120
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 360
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<210> 3394
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3394
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35							40			45						
Tyr	Leu	Lys	Arg	Glu	His	Ser	Leu	Ser	Lys	Pro	Tyr	Gln	Gly	Val	Gly	
50			55							60						
Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	Gly	Asn	Xaa	Met	Val	Met	
65			70							75						
Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	Met	Gln	Ser	Lys	Gln	Gly	Ala	
			85				90									
Leu	Trp	Asn	Arg	Val	Pro	Cys	Phe	Leu	Arg	Asp	Trp	Glu	Leu	Gln	Val	
			100				105			110						
His	Phe	Lys	Ile	His	Gly	Gln	Gly	Lys	Lys	Asn	Leu	His	Gly	Asp	Gly	
115							120			125						
Leu	Ala	Ile	Trp	Tyr	Thr	Lys	Asp	Arg	Met	Gln	Pro	Gly	Pro	Val	Phe	
130			135							140						
Gly	Asn	Met	Asp	Lys	Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr	
145			150							155						
Pro	Asn	Glu	Glu	Lys	Gln	Pro	Phe	Thr	Arg							
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<212> DNA
<213> Homo sapiens
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600
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780
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<210> 3396
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 3396
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 Leu Asn Asp Thr Tyr His Ser Arg Asp Ser Ser Phe Arg Leu Asp Ser
 35 40 45
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
 100 105 110
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
 165 170 175
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
 180 185 190
 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu
 195 200 205

<210> 3397
 <211> 492
 <212> DNA
 <213> Homo sapiens

<400> 3397
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 120
 ccacagagag acagtggcac ctacgagcag ccacagcccc tgatccatga ccgagactct
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 360
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 480
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 492

<210> 3398
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3398
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 20 25 30
 Thr Leu Cys Ser Val Pro Ser Leu Glu Gln Gln Gln Pro Gly Xaa Ala
 35 40 45
 Ala Ser Ala Ile Pro Ser Trp Leu Leu Asn Asp Pro Gly Val Glu Xaa
 50 55 60
 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
 65 70 75 80
 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
 85 90 95
 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
 100 105 110
 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
 115 120 125
 Ala Ser Gly Cys Pro Arg Thr Glu Glu Ala Ala Trp Gly Glu Ile Leu
 130 135 140
 Arg Glu Gly Leu Ser Ser Pro Cys Ser Cys Ser Pro Gly Pro Pro Gly
 145 150 155 160
 Lys Leu Gly

<210> 3399
 <211> 5784
 <212> DNA
 <213> Homo sapiens

<400> 3399
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 180
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 360
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 420

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480
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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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<213> Homo sapiens

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<210> 3403

<211> 1696

<212> DNA

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<400> 3403

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 agcccagatc gtggccattg actccaagcc ttgggacaag tgggaacctc ttccccccaa
 1680
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 1696

<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

Met	Ala	Arg	Asn	Ala	Glu	Lys	Ala	Met	Thr	Ala	Leu	Ala	Arg	Phe	Arg	1	10	15
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Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln	35	40	45
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly	50	55	60
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu	65	70	75
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly	85	90	95
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys	100	105	110
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp	115	120	125
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser	130	135	140
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr	145	150	155
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln	165	170	175
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala	180	185	190
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu	195	200	205
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp	210	215	220
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe	225	230	235
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu	245	250	255
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr	260	265	270
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<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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120
aacctgctcg cctccatccg taagggaat gccattgacg aagcggacat cccgccgcca
180
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
240
gccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
300
gccccagcct catctccagg cttggctaag ccccagatgc ccccagggtcc ctgcagccct
360
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402

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<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

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20          25          30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35          40          45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50          55          60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65          70          75          80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85          90          95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100         105         110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
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Pro Ala Arg Leu Gln Ala
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<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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120

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gggacctttc ccggacaccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc
 180
 ccggcgggga cctttcccgg ancacctggc ctccttggca agcaggtggc ggcaccaaca
 240
 ggcccggggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg
 300
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 360
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 420
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa
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<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

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Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20					25					30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
			35				40					45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
			50			55					60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115				120					125				
Trp	Leu	Ile													
			130												

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 120
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 180
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgtg
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccg gggacggcga ggccctcatg
 300
 taccacacgc acttctcaga acttctggat gagttttccc agaactctt gggtcagctc
 360
 ctgaatgatc ctttcctctc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcggggc
 480
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 540
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 600
 cagacgaacc acccccagga ctcggtccgt ctgtcactct gaccatcaca gccatctcca
 660
 ccncggttg aaaaggagga acctcctctg gaaatgaaca ctggggttga ttctcgtgc
 720
 cagaccatta ttctaaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
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 840
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 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
			35				40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
			50			55					60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
					70					75					80
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85				90						95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
			115				120					125			
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
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<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

<400> 3411

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
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 720
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 780
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 840
 ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat
 900
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 958

<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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Pro	Asn	Gln	Lys	Tyr	Ser	Asp	Gln	Thr	Ile	Ser	Cys	Phe	Leu	Asn	Trp
		20						25					30		
Thr	Val	Gly	Lys	Leu	Lys	Thr	His	Leu	Ser	Asn	Val	Tyr	Pro	Ser	Lys
		35					40					45			
Pro	Leu	Thr	Lys	Asp	Gln	Arg	Leu	Val	Tyr	Ser	Gly	Arg	Leu	Leu	Pro
		50				55					60				
Asp	His	Leu	Gln	Leu	Lys	Asp	Ile	Leu	Arg	Lys	Gln	Asp	Glu	Tyr	His
65				70					75					80	
Met	Val	His	Leu	Val	Cys	Thr	Ser	Arg	Thr	Pro	Pro	Ser	Ser	Pro	Lys
			85					90						95	
Ser	Ser	Thr	Asn	Arg	Glu	Ser	His	Glu	Ala	Leu	Ala	Ser	Ser	Ser	Asn

			100					105					110				
Ser	Ser	Ser	Asp	His	Ser	Gly	Ser	Thr	Thr	Pro	Ser	Ser	Gly	Gln	Glu		
		115					120					125					
Thr	Leu	Ser	Leu	Ala	Val	Gly	Ser	Ser	Ser	Glu	Gly	Leu	Arg	Gln	Arg		
	130					135					140						
Thr	Leu	Pro	Gln	Ala	Gln	Thr	Asp	Gln	Ala	Gln	Ser	His	Gln	Phe	Pro		
145					150					155					160		
Tyr	Val	Met	Gln	Gly	Asn	Val	Asp	Asn	Gln	Phe	Pro	Gly	Gln	Ala	Ala		
			165					170					175				
Pro	Pro	Gly	Phe	Pro	Val	Tyr	Pro	Ala									
		180					185										

<210> 3413

<211> 3344

<212> DNA

<213> Homo sapiens

<400> 3413

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120
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180
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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1020
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1080

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1200
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1260
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<210> 3414

<211> 723

<212> PRT

<213> Homo sapiens

<400> 3414

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Gln	Glu	Leu	Leu	Asp	Lys	Ile	Lys	Glu	Glu	Pro	Asp	Asn	Ala	Gln	Glu
		20						25				30			
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
	35						40				45				
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50				55					60					
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65				70					75					80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
			85						90					95	
Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
		100						105					110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
	115						120					125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
	130					135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
145				150					155					160	
Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
		165						170					175		
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
		180						185					190		
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

		195						200				205					
Gln	Asn	Val	Val	His	Gly	Leu	Cys	Ser	Asp	Ala	Cys	Phe	Ser	Lys	Phe		
	210	.				215					220						
His	Ser	Thr	Asn	Asn	Leu	Thr	Thr	Asn	Cys	Cys	Glu	Asn	Cys	Gly	Ser		
225					230					235					240		
Tyr	Cys	Tyr	Ser	Ser	Ser	Gly	Pro	Cys	Gln	Ser	Gln	Lys	Val	Phe	Ser		
				245					250					255			
Ser	Thr	Ser	Val	Thr	Ala	Tyr	Lys	Gln	Asn	Ser	Ala	Gln	Ile	Pro	Pro		
			260				265						270				
Tyr	Ala	Leu	Gly	Lys	Ser	Leu	Arg	Ser	Ser	Ala	Glu	Met	Ile	Glu	Asn		
		275					280					285					
Thr	Asn	Ser	Leu	Gly	Lys	Thr	Glu	Leu	Phe	Cys	Ser	Ile	Asn	Cys	Leu		
	290					295					300						
Ser	Ala	Tyr	Arg	Val	Lys	Thr	Val	Thr	Ser	Ala	Gly	Val	Gln	Val	Ser		
305					310					315					320		
Cys	His	Ser	Cys	Lys	Thr	Ser	Ala	Ile	Pro	Gln	Tyr	His	Leu	Ala	Met		
				325					330					335			
Ser	Asp	Gly	Thr	Ile	Tyr	Ser	Phe	Cys	Ser	Ser	Ser	Cys	Val	Val	Ala		
			340				345						350				
Phe	Gln	Asn	Val	Phe	Ser	Lys	Pro	Lys	Gly	Thr	Asn	Ser	Ser	Ala	Val		
		355					360					365					
Pro	Leu	Ser	Gln	Gly	Gln	Val	Val	Val	Ser	Pro	Pro	Ser	Ser	Arg	Ser		
	370					375					380						
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Ile	Arg	Gly	Ser	Ala	Ala	Ala	Ser	Leu	Gln	Pro	Leu	Gly	Glu	Gln	Ser		
				405					410					415			
Gln	Gln	Val	Ala	Leu	Thr	His	Thr	Val	Val	Lys	Leu	Lys	Cys	Gln	His		
			420					425					430				
Cys	Asn	His	Leu	Phe	Ala	Thr	Lys	Pro	Glu	Leu	Leu	Phe	Tyr	Lys	Gly		
		435					440					445					
Lys	Met	Phe	Leu	Phe	Cys	Gly	Lys	Asn	Cys	Ser	Asp	Glu	Tyr	Lys	Lys		
	450					455					460						
Lys	Asn	Lys	Val	Val	Ala	Met	Cys	Glu	Tyr	Cys	Lys	Ile	Glu	Lys	Ile		
465					470					475					480		
Val	Lys	Glu	Thr	Val	Arg	Phe	Ser	Gly	Ala	Asp	Lys	Ser	Phe	Cys	Ser		
				485					490					495			
Glu	Gly	Cys	Lys	Leu	Leu	Tyr	Lys	His	Asp	Leu	Ala	Lys	Arg	Trp	Gly		
			500					505					510				
Asn	His	Cys	Lys	Met	Cys	Ser	Tyr	Cys	Ser	Gln	Thr	Ser	Pro	Asn	Leu		
		515					520					525					
Val	Gln	Asn	Arg	Leu	Glu	Gly	Lys	Leu	Glu	Glu	Phe	Cys	Cys	Glu	Asp		
	530					535					540						
Cys	Met	Ser	Lys	Phe	Thr	Val	Leu	Phe	Tyr	Gln	Met	Ala	Lys	Cys	Asp		
545					550					555					560		

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Leu	Ser	Thr	Gly	Asn	Thr	Asn	Ser	Val	Leu	Lys	Gly	Ala	Val	Thr	Lys
				645					650					655	
Glu	Ala	Ala	Lys	Ile	Ile	Gln	Asp	Glu	Ser	Thr	Gln	Glu	Asp	Ala	Met
			660					665					670		
Lys	Phe	Pro	Ser	Ser	Gln	Ser	Ser	Gln	Pro	Ser	Arg	Leu	Leu	Lys	Asn
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Lys	Gly	Ile	Ser	Cys	Lys	Pro	Val	Thr	Gln	Thr	Lys	Ala	Thr	Ser	Cys
	690				695					700					
Lys	Pro	His	Thr	Gln	His	Lys	Glu	Cys	Gln	Thr	Glu	Cys	Pro	Val	Arg
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<210> 3415

<211> 3501

<212> DNA

<213> Homo sapiens

<400> 3415

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300
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360
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420
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480
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1020

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cgtttgtccg tgctagaaag gttaaaggat caagcagatg gaaaatacgt cttagttgct
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<210> 3416

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3416

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		20					25				30			
Asn	Pro	Ala	Phe	Lys	Pro	Val	Leu	Ala	Ile	Ile	Gln	Ala	Gly	Asp
		35				40				45				
Asn	Leu	Met	Gln	Glu	Ile	Asn	Gln	Asn	Leu	Ala	Glu	Glu	Ala	Gly
	50				55					60				
Asn	Ile	Thr	His	Ile	Cys	Leu	Pro	Pro	Asp	Ser	Ser	Glu	Ala	Glu
65				70					75				80	
Ile	Asp	Glu	Ile	Leu	Lys	Ile	Asn	Glu	Asp	Thr	Arg	Val	His	Gly
		85					90					95		
Ala	Leu	Gln	Ile	Ser	Glu	Asn	Leu	Phe	Ser	Asn	Lys	Val	Leu	Asn
		100					105					110		
Leu	Lys	Pro	Glu	Lys	Asp	Val	Asp	Gly	Val	Thr	Asp	Ile	Asn	Leu
	115						120					125		
Lys	Leu	Val	Arg	Gly	Asp	Ala	His	Glu	Cys	Phe	Val	Ser	Pro	Val

130		135		140
Lys Ala Val Ile Glu Leu	Leu Glu Lys Ser Val Gly Val Asn Leu Asp			
145		150		155
Gly Lys Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala				160
		165		170
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln				175
		180		185
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val				190
		195		200
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln				205
		210		215
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys				220
225		230		235
Val Gly Cys Gly Ser Pro Arg Ile Xaa Ile Leu Val Asp Ser Leu Arg				240
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Lys Met Met				

<210> 3417
 <211> 405
 <212> DNA
 <213> Homo sapiens

<400> 3417
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 180
 attacaatcg attggaacaa gctccagagc ctctcgcat tccagcctgc attgctcttt
 240
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 300
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 360
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 405

<210> 3418
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3418
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 20 25 30
 Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
 35 40 45
 Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
 50 55 60
 Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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65          70          75          80
Tyr Leu Gln Val Asn Phe Leu Leu Glu Met Ile Thr Arg Tyr
          85          90

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<210> 3419
<211> 418
<212> DNA
<213> Homo sapiens
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120
aatgggggcta cgtcgcgtga cctcacgtgt ggttcctctg agcgtagtgc tttccagggc
180
aaccgtgtca cagtgcagat ggacgcacgg acggcgggtga gcctttaacg ccaagcaaca
240
agtcccattg tggacggagg tttgcatttc tcctgggtcc acatctatgg tgccccata
300
gggcgccttg aggtctgcgc cggtcaggct tgccatttct ggggaagagg actggggggg
360
agccttctgc cccattacc accgccatt ccctgggcgc tctcggagag aggctgga
418
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<210> 3420
<211> 105
<212> PRT
<213> Homo sapiens
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<400> 3420															
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Ile	Asp	Val	Asp	Pro	Gly	Glu	Met	Gln	Thr	Ser	Val	His	Asn	Gly	Thr
			20					25					30		
Cys	Cys	Leu	Ala	Leu	Lys	Ala	His	Arg	Arg	Pro	Cys	Val	His	Leu	His
		35					40					45			
Cys	Asp	Thr	Val	Ala	Leu	Glu	Ser	Thr	Thr	Leu	Arg	Gly	Thr	Thr	Arg
	50					55					60				
Glu	Val	Thr	Arg	Arg	Ser	Pro	Ile	Asn	Met	Lys	His	Pro	Glu	Gln	Gly
65					70					75					80
Glu	Pro	Gly	Gly	Pro	Ala	Asp	Gln	Trp	Val	Pro	Arg	Arg	Glu	Trp	Ala
				85					90					95	
Gly	Trp	Asp	Gly	Ser	Gly	Val	Asn	Arg							
			100					105							

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<210> 3421
<211> 2988
<212> DNA
<213> Homo sapiens
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420
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720
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1680

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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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				20				25					30		
Phe	Ser	Ser	Lys	Thr	Val	Thr	Val	Leu	Leu	Leu	Ala	Gln	Thr	Thr	Cys
		35					40					45			
Leu	Leu	Leu	Phe	Ile	Ile	Ser	Arg	Pro	Gly	Pro	Ser	Ser	Pro	Ala	Gly
	50					55					60				
Gly	Glu	Asp	Arg	Val	His	Val	Leu	Val	Leu	Ser	Ser	Trp	Arg	Ser	Gly
65					70					75					80
Ser	Ser	Phe	Leu	Gly	Gln	Leu	Phe	Ser	Gln	His	Pro	Asp	Val	Phe	Tyr
				85					90					95	
Leu	Met	Glu	Pro	Ala	Trp	His	Val	Trp	Thr	Thr	Leu	Ser	Gln	Gly	Ser
			100					105					110		
Ala	Ala	Thr	Leu	His	Met	Ala	Val	Arg	Asp	Leu	Met	Arg	Ser	Ile	Phe
		115					120					125			
Leu	Cys	Asp	Met	Asp	Val	Phe	Asp	Ala	Tyr	Met	Glu	Pro	Gly	Pro	Arg
	130					135					140				
Arg	Gln	Ser	Ser	Leu	Phe	Gln	Trp	Glu	Asn	Ser	Arg	Ala	Leu	Cys	Ser
145					150					155					160
Ala	Pro	Ala	Cys	Asp	Ile	Ile	Pro	Gln	Asp	Glu	Ile	Ile	Pro	Arg	Ala
				165					170					175	
His	Cys	Arg	Leu	Leu	Cys	Ser	Gln	Gln	Pro	Phe	Glu	Val	Val	Glu	Lys
			180					185					190		
Ala	Cys	Arg	Ser	Tyr	Ser	His	Val	Val	Leu	Lys	Glu	Val	Arg	Phe	Phe
		195					200					205			
Asn	Leu	Gln	Ser	Leu	Tyr	Pro	Leu	Leu	Lys	Asp	Pro	Ser	Leu	Asn	Leu
	210					215					220				
His	Ile	Val	His	Leu	Val	Arg	Asp	Pro	Arg	Ala	Val	Leu	Arg	Ser	Arg
225					230					235					240
Glu	Ala	Ala	Gly	Pro	Ile	Leu	Ala	Arg	Asp	Asn	Gly	Ile	Val	Leu	Gly
				245					250					255	
Thr	Asn	Gly	Lys	Trp	Val	Glu	Ala	Asp	Pro	His	Leu	Arg	Leu	Ile	Arg
			260					265					270		
Glu	Val	Cys	Arg	Ser	His	Val	Arg	Ile	Ala	Glu	Ala	Ala	Thr	Leu	Lys
		275					280					285			
Pro	Pro	Pro	Phe	Leu	Arg	Gly	Arg	Tyr	Arg	Leu	Val	Arg	Phe	Glu	Asp
	290					295					300				
Leu	Ala	Arg	Glu	Pro	Leu	Ala	Glu	Ile	Arg	Ala	Leu	Tyr	Ala	Phe	Thr
305					310					315					320
Gly	Leu	Thr	Leu	Thr	Pro	Gln	Leu	Glu	Ala	Trp	Ile	His	Asn	Ile	Thr
				325					330					335	
His	Gly	Ser	Gly	Ile	Gly	Lys	Pro	Ile	Glu	Ala	Phe	His	Thr	Ser	Ser
			340					345					350		
Arg	Asn	Ala	Arg	Asn	Val	Ser	Gln	Ala	Trp	Arg	His	Ala	Leu	Pro	Phe
		355					360					365			
Thr	Lys	Ile	Leu	Arg	Val	Gln	Glu	Val	Cys	Ala	Gly	Ala	Leu</		

<210> 3423

<211> 1851

<212> DNA

<213> Homo sapiens

<400> 3423

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120
cgttcattgg ccgtggcctc tctagctccg cccctaggg gggtcgacct cgtaaccagt
180
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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900
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1080
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1200
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1260
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1320
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1440
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 1620
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 1680
 aagtcgcaca tctccaggcc cccactgaac tccggggacc tctactgact gcttgctggg
 1740
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 1800
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 1851

<210> 3424

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3424

Met	Leu	Trp	Pro	Gln	Val	Phe	Ser	Glu	Leu	Gly	Phe	Pro	Pro	Ala	Val
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Gln	Arg	Trp	Val	Ile	Gly	Arg	Cys	Leu	Cys	Val	Pro	Glu	Arg	Ser	Leu
	20						25				30				
Ala	Ser	Tyr	Gly	Val	Arg	Gln	Asp	Gly	Asp	Pro	Ala	Phe	Leu	Tyr	Leu
	35					40					45				
Leu	Ser	Ala	Pro	Arg	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ser	Pro	Gln	His
	50					55					60				
Pro	Gln	Lys	Met	Asp	Gly	Glu	Leu	Gly	Arg	Leu	Phe	Pro	Pro	Ser	Leu
65					70				75					80	
Gly	Leu	Pro	Pro	Gly	Pro	Gln	Pro	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Pro
			85					90						95	
Leu	Gln	Pro	Ser	Trp	Ser	Cys	Pro	Ser	Cys	Thr	Phe	Ile	Asn	Ala	Pro
		100					105						110		
Asp	Arg	Pro	Gly	Cys	Glu	Met	Cys	Ser	Thr	Gln	Arg	Pro	Cys	Thr	Trp
	115						120					125			
Asp	Pro	Leu	Ala	Ala	Ala	Ser	Thr								
	130					135									

<210> 3425

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 3425

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 120
 gaggaggaag tgaggccgcy cggaaggaag gcggcgagcc cgggggcccc gaggccttgg
 180
 ccgcgtcaca gcacccacat ggctcttga gtgggcgcyg ccttcgagga actgcctcac
 240
 gacggcacgt gtgacgagtg cgagcccgac gaggtccgg gggccgagga agtgtgccga
 300

gaatgaggct tctgctactg ccgccgccat gccgaggcgc acaggcagaa gttcctcagt
 360
 caccatctgg ccgaatacgt ccacggctcc caggcctgga ccccgccagc tgacggagag
 420
 ggggcgggga aggaagaagc ggaggtcaag gtggagcagg agaggagat agaaagcgag
 480
 gcaggggaag agagtgagtc ggaggaagag agcgagtcag aggaagagag cgagacagag
 540
 gaagagagtg aggatgagag cgatgaggag agtgaagaag acagcgagga agaaatggag
 600
 gatgagcaag aaagcgaggc cgaagaagac aaccaagaag aaggggaatc cgaggcggag
 660
 ggagaaactg aggcagaaag tgaatttgac ccagaaatag aaatggaagc agagagagtg
 720
 gccaaagagga agtgtccgga ccatgggctt gatttgagta cctattgcca ggaagatagg
 780
 cagctcatct gtgtcctgtg tccagtcatt ggggctcacc agggccacca actctccacc
 840
 ctagacgaag cctttgaaga attaagaagc aaagactcag gtggactgaa ggccgctatg
 900
 atcgaattgg tggaaaagggt gaagttcaag agctcagacc ctaaagtaac tcgggaccaa
 960
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 1020
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 1080
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 1200
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 1320
 tgctcagcaa caaacgtact tccaccagat gtgtccccag atccacagca ggcacatatt
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 1416

<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

Ser Gly Gly Lys Gly Leu Cys Cys Cys Ala Arg Ala Gly Ala Ala Ala
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 Ala Pro Gly Pro Ala Ser Arg Arg Gly Ala Val Gln Ala Gly Gly Asp
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 Ser Leu Gly Arg Asp Pro Gly Arg Glu Glu Glu Val Arg Pro Arg Gly
 35 40 45
 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
 50 55 60
 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

65					70					75				80	
Asp	Gly	Thr	Cys	Asp	Glu	Cys	Glu	Pro	Asp	Glu	Ala	Pro	Gly	Ala	Glu
				85					90					95	
Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
			100					105					110		
Ala	His	Arg	Gln	Lys	Phe	Leu	Ser	His	His	Leu	Ala	Glu	Tyr	Val	His
		115					120					125			
Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
145					150					155					160
Ala	Gly	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu
				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
			180					185					190		
Glu	Asp	Ser	Glu	Glu	Glu	Met	Glu	Asp	Glu	Gln	Glu	Ser	Glu	Ala	Glu
		195					200					205			
Glu	Asp	Asn	Gln	Glu	Glu	Gly	Glu	Ser	Glu	Ala	Glu	Gly	Glu	Thr	Glu
	210					215					220				
Ala	Glu	Ser	Glu	Phe	Asp	Pro	Glu	Ile	Glu	Met	Glu	Ala	Glu	Arg	Val
225					230					235					240
Ala	Lys	Arg	Lys	Cys	Pro	Asp	His	Gly	Leu	Asp	Leu	Ser	Thr	Tyr	Cys
			245					250						255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
		260						265					270		
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
		275					280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
	290					295					300				
Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315					320
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
			325					330						335	
Ala	Asp	Glu	Glu	Gln	Lys	Ala	Leu	His	Leu	Val	Asp	Ile	Gln	Glu	Ala
		340						345					350		
Met	Ala	Thr	Ala	His	Val	Thr	Glu	Ile	Leu	Ala	Asp	Ile	Gln	Ser	His
	355						360					365			
Met	Asp	Arg	Leu	Met	Thr	Gln	Met	Ala	Gln	Ala	Lys	Glu	Gln	Leu	Asp
	370					375					380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
385					390					395					400
Pro	Ser	Gly	Ala	Ser	Glu	Glu	Glu	Asp	Thr						
				405					410						

<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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ccggatttca atgtcatagt tccattgtc aatgacatca tcggagaact tgacctgctg

120

ggggtctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg
 180
 caggatttttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg
 240
 cagcatggaa gagttcaaag ttcccatatt gctcatcttc tcacaatctt ctgtttccat
 300
 ctcttcaaaa ttttgcagag aatacaatga tggccttggc ttgttttctc catccaccga
 360
 agccccctgtg atattggaca atgccaaaga atccatcgaa tcccgaacac tttgctctgg
 420
 tttcaggtct gacagacact ccaggggaatc ttcataccac tgtgtttcat catgattata
 480
 ccctgaagcc ccatgggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg
 540
 gtggctgcca taagcagaat cgcccagtcc atcttgtgac
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<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
	50					55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70					75				80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105					110			
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115				120					125				
Glu	Arg	Gly	Ser												
	130														

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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 120
 gtcagettcc ttttcatact ttcccggcgt tctctccacg agcaggtgca ccagggaacct
 180

gtccctctgt cctacacggt caccacagtg acgacccaag gcttcccctt gcctacaggg
 240
 cagcacatcc ctggctgcag tgcccagcag ctcccagcat gctccgtgat gttcagtggg
 300
 cagcattacc ccctctgctg cctcccgcgc ccgcttatcc aggcgtgcac catgcagcag
 360
 ctgcctgtgc cctatcaggc ctacccccac ctcatctcca gtgaccacta catcctgcac
 420
 cccccaccac cgggcacaca cccagcagct ccagggtctg tataagaaac cctgtggaag
 480
 gcccatccct gtcctaggcc acccaggcag gacactccac tgtaaggcc cacagcctca
 540
 actcctgggc ctctgccaag ctgtgaggca ggtacagggg tactggaagg ttcctgaacc
 600
 ttgaaacact ctattaccaa atgtgaacac gcgt
 634

<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

Phe	Leu	Leu	Arg	Val	Ala	Leu	Ala	Val	Ser	Phe	Leu	Phe	Ile	Leu	Ser
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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35				40						45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
		50				55					60				
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85				90					95		
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105					110		
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
			115				120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120
 ctgcgtggga gcagcgtccc aatgccagcg cgtcacgtcg ccagcgtgc cctagcacgc
 180
 agcgccgcca gccgtgtcgc caacagtacc aaatcgctcg gcagcggctt cgccccgccg
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttcctgtgct caccaccaac
 300
 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc
 360
 ctcttcatct tgggctttgc ctccggetac ctggttcctgg gttaccccg c agacagattt
 420
 ggccgtcgcg ggattgtgct gctgaccttg gggctgggtgg gccctgtgg agtaggaggg
 480
 gctgctgcag gtcctccac aggcgtcatg gccctccgat tcctcttggg ctttctgctt
 540
 gccgggtgtt acctgggtgt ctacctgatg cgcttgaggc tgtgcgacc aaccagagg
 600
 cttcgggtgg ccctggcagg ggagttggtg ggggtgggag ggcacttct gttcctgggc
 660
 ctggcccttg tctctaagga ttggcgattc ctacagcgaa tgatcaccgc tcctgcatc
 720
 ctcttctgt tttatggctg gcctgggttg ttcctggagt ccgcacgggtg gctgatagtg
 780
 aagcggcaga ttgaggaggc tcagtctgtg ctgaggatcc tggctgagcg aaaccggccc
 840
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 900
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 960
 aaaaatctgc ttatcctggg cttcaccaac ttcattgccc atgccattcg ccactgctac
 1020
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 1080
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 1140
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 1200
 tgggattgtg agcatcctat cttccccaca gtgtgggctc aacaaggga ccccaacaga
 1260
 gatctgaacg aggtgccat caccactttc tctgtccttg ggctcttctc ctcccaagct
 1320
 gccgccatcc tcagcacct ccttgctgct gaggtcatcc ccaccactgt ccggggccgt
 1380
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 1396

<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu
 20 25 30
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50						55						60					
Met	Ile	Thr	Ala	Pro	Cys	Ile	Leu	Phe	Leu	Phe	Tyr	Gly	Trp	Pro	Gly		
65					70					75					80		
Leu	Phe	Leu	Glu	Ser	Ala	Arg	Trp	Leu	Ile	Val	Lys	Arg	Gln	Ile	Glu		
				85					90					95			
Glu	Ala	Gln	Ser	Val	Leu	Arg	Ile	Leu	Ala	Glu	Arg	Asn	Arg	Pro	His		
			100					105					110				
Gly	Gln	Met	Leu	Gly	Glu	Glu	Ala	Gln	Glu	Ala	Leu	Gln	Asp	Leu	Glu		
		115					120					125					
Asn	Thr	Cys	Pro	Leu	Pro	Ala	Thr	Ser	Ser	Phe	Ser	Phe	Ala	Ser	Leu		
		130				135					140						
Leu	Asn	Tyr	Arg	Asn	Ile	Trp	Lys	Asn	Leu	Leu	Ile	Leu	Gly	Phe	Thr		
145					150					155					160		
Asn	Phe	Ile	Ala	His	Ala	Ile	Arg	His	Cys	Tyr	Gln	Pro	Val	Gly	Gly		
				165					170					175			
Gly	Gly	Ser	Pro	Ser	Asp	Phe	Tyr	Leu	Cys	Ser	Leu	Leu	Ala	Ser	Gly		
			180					185					190				
Thr	Ala	Ala	Leu	Ala	Cys	Val	Phe	Leu	Gly	Val	Thr	Val	Asp	Arg	Phe		
		195					200					205					
Gly	Arg	Arg	Gly	Ile	Leu	Leu	Leu	Ser	Met	Thr	Leu	Thr	Gly	Ile	Ala		
		210				215					220						
Ser	Leu	Val	Leu	Leu	Gly	Leu	Trp	Asp	Cys	Glu	His	Pro	Ile	Phe	Pro		
225					230					235				240			
Thr	Val	Trp	Ala	Gln	Gln	Gly	Asn	Pro	Asn	Arg	Asp	Leu	Asn	Glu	Ala		
				245					250					255			
Ala	Ile	Thr	Thr	Phe	Ser	Val	Leu	Gly	Leu	Phe	Ser	Ser	Gln	Ala	Ala		
			260					265					270				
Ala	Ile	Leu	Ser	Thr	Leu	Leu	Ala	Ala	Glu	Val	Ile	Pro	Thr	Thr	Val		
		275					280					285					
Arg	Gly	Arg	Gly	Leu	Gly	Leu	Ile										
		290				295											

<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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120

ccgagccact cccgttccca caccagggtcg aacttgaaaa gggacgtcgc ccacctgtac
180

cgaggagtgc gctcgcgcta catcatgggg tcaggagaat ccttcatgca gctgcagcag
240

cgtctcctga gagagaagga ggccaagatc aggaaggcct tggacaggct tcgcaagaag
300

aggcacctgc tccgccggca gcggacgagg cgggagttcc ccgtgatctc cgtgggtggg
360

tacaccaact gcggtgagca cgcgccaggg ggaggggcct tccgcggtct ccgtgtcacc
420

ggtgaggact cgcccggggg agggcagggg gtccctgtcg tctcagtggt gccgtacgac
480

agctgcggtg agcacgtgcc caggagaggg ggttcccatg gtcgccgtgt ggggtacacc
 540
 agctgctgtg agagctcacc caggagacgg gtttctctgt gtctctgtgt ggggtacagc
 600
 agccaagggtg aggatgtcat ctaccccatc ctcccatcca gagctttacc accctgtcta
 660
 taccacaacc tccctccat ctacaccatc ctctgtcta gaccatcccc actgcctat
 720
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 780
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 900
 caccactgcc ccagctatac caccaccccg tctacataat ccacccatct gtctacacca
 960
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 1020
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<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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		20						25					30		
Gly	Arg	Gln	Arg	Pro	Gln	Arg	Pro	Ser	His	Ser	Arg	Ser	His	Thr	Arg
		35					40					45			
Ser	Asn	Leu	Lys	Arg	Asp	Val	Ala	His	Leu	Tyr	Arg	Gly	Val	Gly	Ser
	50					55					60				
Arg	Tyr	Ile	Met	Gly	Ser	Gly	Glu	Ser	Phe	Met	Gln	Leu	Gln	Gln	Arg
65					70					75					80
Leu	Leu	Arg	Glu	Lys	Glu	Ala	Lys	Ile	Arg	Lys	Ala	Leu	Asp	Arg	Leu
				85					90					95	
Arg	Lys	Lys	Arg	His	Leu	Leu	Arg	Arg	Gln	Arg	Thr	Arg	Arg	Glu	Phe
			100						105					110	
Pro	Val	Ile	Ser	Val	Val	Gly	Tyr	Thr	Asn	Cys	Gly	Glu	His	Ala	Pro
		115					120					125			
Arg	Gly	Gly	Ala	Phe	Arg	Gly	Leu	Arg	Val	Thr	Gly	Glu	Asp	Ser	Pro
	130					135					140				
Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
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<210> 3435
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<212> DNA
<213> Homo sapiens
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720
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840

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1020
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1080
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<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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			20					25					30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
		35					40					45			
Glu	Ser	Asp	Gly	Ser	Gln	Cys	Gln	His	Trp	Val	Arg	Leu	Thr	Met	Lys
	50					55					60				
Lys	Gly	Thr	Ile	Val	Lys	Lys	Leu	Leu	Leu	Ala	Val	Asp	Thr	Thr	Asp
65					70					75					80
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				85					90					95	
Asn	Leu	Lys	Lys	Leu	Ser	Asp	Val	Ser	Ile	Asp	Xaa	Arg	Pro	Ser	Ser
			100					105					110		
Gly	Xaa	Val	Cys	Val	Leu	Glu	Asp	Met	Thr	Val	His	Leu	Pro	Ile	Ile
	115						120					125			
Glu	Ile	Arg	Ile	Val	Glu	Cys	Arg	Asp	Asp	Gly	Ile	Asp	Val	Arg	Leu
	130					135					140				
Arg	Gly	Val	Lys	Ile	Lys	Ser	Ser	Arg	Gln	Arg	Glu	Leu	Gly	Leu	Asn
145					150					155					160
Ala	Asp	Leu	Phe	Gln	Pro	Thr	Ser	Leu	Val	Arg	Tyr	Pro	Arg	Leu	Glu
				165					170					175	
Gly	Thr	Asp	Pro	Glu	Val	Leu	Tyr	Arg	Arg	Ala	Val	Leu	Leu	Gln	Arg
			180					185					190		
Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
		195					200					205			
Asp	His	Thr	Leu	Gly	Thr	Phe	Ser	Glu	Ile	Lys	Gln	Val	Lys	Gln	Phe
	210					215					220				
Leu	Leu	Leu	Ser	Arg	Gln	Arg	Pro	Gly	Leu	Val	Ala	Gln	Cys	Leu	Arg
225					230					235					240
Asp	Ser	Glu	Ser	Ser	Lys	Pro	Ser	Phe	Met	Pro	Arg	Leu	Tyr	Ile	Asn
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<210> 3437

<211> 2081

<212> DNA

<213> Homo sapiens

<400> 3437

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120					
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180					
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240					
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300					
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360					
gtccccctccc	agcttccccct	caggggtccc	tgtcttgcca	ctcagcccct	gcctgcacag
420					
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480					
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540					
tggcagctgt	gatcatcccc	tcctcctcct	gagcctggca	accttgccag	ctctccttcc
600					
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660					
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720					
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780					
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840					

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 1920
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 1980
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 2081

<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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			20					25					30		
Glu	Ala	Glu	Pro	Gln	Trp	Glu	Arg	Glu	Gly	Ala	Arg	Phe	Thr	Thr	Pro

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 1320
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<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35				40					45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50			55					60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
				85				90					95		
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100				105					110			
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
			115				120					125			
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
			130			135					140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
145					150					155				160	
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
				165				170						175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
			195				200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
			210			215					220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235					240
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
				245				250						255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

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<210> 3441
 <211> 2074
 <212> DNA
 <213> Homo sapiens

<400> 3441
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 180
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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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		20						25					30		
Ala	Glu	Leu	Leu	Met	Ser	Leu	His	Asp	Leu	Asp	Val	Gly	Glu	Ile	Cys
		35					40					45			
Thr	Val	Asp	Pro	Cys	His	Lys	Phe	Thr	Trp	Cys	Leu	Asp	Ala	Cys	Ile
	50					55					60				
Arg	Glu	Arg	Phe	Val	Asp	Ser	Lys	Arg	Ala	Arg	Glu	Leu	Gln	Gly	Phe
65					70				75					80	
Leu	Asp	Asp	Val	Lys	Lys	Gly	Gln	Glu	Gln	Val	Leu	Gly	Asp	Leu	Ser
				85					90					95	
Met	Ile	Leu	Cys	Asp	Pro	Phe	Ala	Ile	Asn	Thr	Leu	Ala	Leu	Ser	Thr
			100					105					110		
Val	Arg	His	Leu	Gln	Glu	Leu	Val	Gly	Gln	Glu	Thr	Leu	Pro	Arg	Asp
		115					120					125			
Ser	Pro	Asp	Leu	Leu	Leu	Leu	Leu	Arg	Leu	Leu	Ala	Leu	Gly	Gln	Gly
		130				135					140				
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145				150					155					160	
Val	Glu	Leu	Ile	Thr	Arg	Phe	Leu	Pro	Met	Leu	Met	Ser	Phe	Leu	Val

165							170							175							
Asp	Asp	Tyr	Thr	Phe	Asn	Val	Asp	Gln	Lys	Leu	Pro	Ala	Glu	Glu	Lys						
180							185							190							
Ala	Pro	Val	Ser	Tyr	Pro	Asn	Thr	Leu	Pro	Glu	Ser	Phe	Thr	Lys	Phe						
195							200							205							
Leu	Gln	Glu	Gln	Arg	Met	Ala	Cys	Glu	Val	Gly	Leu	Tyr	Tyr	Val	Leu						
210							215							220							
His	Ile	Thr	Lys	Gln	Arg	Asn	Lys	Asn	Ala	Leu	Leu	Arg	Leu	Leu	Pro						
225	230							235							240						
Gly	Leu	Val	Glu	Thr	Phe	Gly	Asp	Leu	Ala	Phe	Gly	Asp	Ile	Phe	Leu						
245							250							255							
His	Leu	Leu	Thr	Gly	Asn	Leu	Ala	Leu	Leu	Ala	Asp	Glu	Phe	Ala	Leu						
260							265							270							
Glu	Asp	Phe	Cys	Ser	Ser	Leu	Phe	Asp	Gly	Phe	Phe	Leu	Thr	Ala	Ser						
275							280							285							
Pro	Arg	Lys	Glu	Asn	Val	His	Arg	His	Ala	Leu	Arg	Leu	Leu	Ile	His						
290							295							300							
Leu	His	Pro	Arg	Val	Ala	Pro	Ser	Lys	Leu	Glu	Ala	Leu	Gln	Lys	Ala						
305	310							315							320						
Leu	Glu	Pro	Thr	Gly	Gln	Ser	Gly	Glu	Ala	Val	Lys	Glu	Leu	Tyr	Ser						
325							330							335							
Gln	Leu	Gly	Glu	Lys	Leu	Glu	Gln	Leu	Asp	His	Arg	Lys	Pro	Ser	Pro						
340							345							350							
Ala	Gln	Ala	Ala	Glu	Thr	Pro	Ala	Leu	Glu	Leu	Pro	Leu	Pro	Ser	Val						
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370																					

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<210> 3443
<211> 2070
<212> DNA
<213> Homo sapiens
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180
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240
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360
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420
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1380
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1920
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2040
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2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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      20           25           30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
      35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
      50           55           60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
      65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
      85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
      100           105           110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
      115           120           125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
      130           135           140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
      145           150           155           160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
      165           170           175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
      180           185           190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
      195           200           205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
      210           215           220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
      225           230           235           240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
      245           250           255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
      260           265           270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
      275           280           285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
      290           295           300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
      305           310           315           320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
      325           330           335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
      340           345           350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
      355           360           365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
      370           375           380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
      385           390           395           400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

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405 410 415
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val
 420 425 430
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala
 435 440 445
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr
 450 455 460
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu
 465 470 475 480
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu
 485 490 495
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln
 500 505 510
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys
 515 520 525
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp
 530 535 540
 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr
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 Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser
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 Lys Val Asn

<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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 120
 cctgcatgc agttgggccc cgggcggggg tggagcctac tcggggcgac tgcgatggac
 180
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 240
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 300
 aatttcattg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac
 360
 acacctatct ttaatgaata catttccttg gtagaaaaat acattgaaga acagctgctg
 420
 cagcggattc ctgagttcaa catggcagcc ttcaccacaa cattacacca tctgttcctg
 480
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 540
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 600
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 660
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 720

tgtcaccagc ccaataggct cagctcatga tgacagaaca catcttggaa agactgactc
780
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960
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1440
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1860
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1920
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1980
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2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

Met Asp Ala Leu Glu Gly Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

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Ser Asp Ala Glu Phe Asp Ala Val Val Gly Tyr Leu Glu Asp Ile Ile			
20	25	30	
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr			
35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
65	70	75	80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly			
100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
130	135	140	
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu			
145	150	155	160
Pro Ala Ser Gln Asn Asn Leu Arg His			
165			

<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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 120
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 240
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 300
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 360
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 420
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 480
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 540
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 720
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 780

cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcaccaa aacagtggca
 840
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 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
		50				55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70					75					80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
				85					90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
		130				135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145					150					155					160
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
				165					170					175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
			180					185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
		195					200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
		210				215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225					230					235					240
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245						250					255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
			260					265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
		275					280						285		
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
		290				295					300				

<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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120
ccggcccttc tggccggcac caaccccggt gctgtcgtcg cggatggagg cagttgcccc
180
gcacactacc cgggtgcacga gtgcgtcttc aaggggggatg tgaggagact ctctctctc
240
atccgcacgc acaatatcgg gcagaaagat aatcacggaa atactccttt acaccttgct
300
gtgatgttag gaaataaaga atgtgcccat ttacttttgg ctcaaatgc tccagtcaag
360
gtgaaaaatg ctccagggatg gagccctctg gcggaagcca tcagctatgg agataggcag
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480
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720
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780
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
          20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
          35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
          50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
          85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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	100		105		110										
Leu	Ala	His	Asn	Ala	Pro	Val	Lys	Val	Lys	Asn	Ala	Gln	Gly	Trp	Ser
	115						120					125			
Pro	Leu	Ala	Glu	Ala	Ile	Ser	Tyr	Gly	Asp	Arg	Gln	Met	Ile	Thr	Ala
	130						135					140			
Leu	Leu	Arg	Lys	Leu	Lys	Gln	Gln	Ser	Arg	Glu	Ser	Val	Glu	Glu	Lys
145					150					155					160
Arg	Pro	Arg	Leu	Leu	Lys	Ala	Leu	Lys	Glu	Leu	Gly	Asp	Phe	Tyr	Leu
			165						170					175	
Glu	Leu	His	Trp	Asp	Phe	Gln	Ser	Trp	Val	Pro	Leu	Leu	Ser	Arg	Ile
		180						185					190		
Leu	Pro	Ser	Asp	Ala	Cys	Lys	Ile	Tyr	Lys	Gln	Gly	Ile	Asn	Ile	Arg
	195						200					205			
Leu	Asp	Thr	Thr	Leu	Ile	Asp	Phe	Thr	Asp	Met	Lys	Cys	Gln	Arg	Gly
	210				215						220				
Asp	Leu	Ser	Phe	Ile	Phe	Asn	Gly	Asp	Ala	Ala	Pro	Ser	Glu	Ser	Phe
225					230					235					240
Val	Val	Leu	Asp	Asn	Glu	Gln	Lys	Val	Tyr	Gln	Arg	Ile	His	His	Glu
				245					250					255	
Ala	His	Ile	Pro	Gly	Ile	Arg	Asp	Gly	Asn	Arg	Arg	Arg	Gly	Gly	Tyr
			260					265					270		
Phe	Asn	Glu	Gln												
			275												

<210> 3451

<211> 595

<212> DNA

<213> Homo sapiens

<400> 3451

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120

gaaatattca gtaagtagtg ccctgccatt gcagggttgg atgtccttct gccagcaaaa
180

cccagcatga acctctggct tgtggagatg tcttcagct ggaaacctga gtgagcgaag
240

ttgaactgtg agggcgccac aactgagaga agattctgcc tccgaaccct ctgaatgaga
300

gtctgaagga tctgatcttg ggttgcttta cttagtcctt cgtgggtattg gtgtgtgtca
360

atgctggagt ccctcagctc cttagctgaa aagagctgaa ggggccttgg aacctggggg
420

agctgcttac tttgcaaggt tttgccagc tgctgctgcg tagctggatg ggactgtctc
480

tcattaactt cctctctggt gctattttct gttgtgttgg tagctatgag cgctcccatc
540

cccctttcct cttttgcagg caggggaacc gcttccattt caactttggg gagag
595

<210> 3452

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3452

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Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
          20           25           30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
          35           40           45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
          50           55           60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65           70           75           80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
          85           90           95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
          100          105          110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
          115          120          125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
          130          135          140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145          150          155          160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
          165          170          175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
          180          185          190

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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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120
gcgttagtggt atacgctcac cgggataccta tccccagtac aggaggtgcg ggcggctgct
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gaagaacaga ttaaggtgct ggaggtgacg gaggaatttg gtgttcactt ggcagaactg
240
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300
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360
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477

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<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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Xaa Arg Val Lys Gly Pro Gly Arg Gly Ala Gly Gly Leu Arg Gly Glu
 1           5           10           15
Lys Met Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly
 20           25           30
Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
 35           40           45
Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
 50           55           60
Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
 65           70           75           80
Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
 85           90           95
Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
100           105           110
Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
115           120           125
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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

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Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro	35	40	45	
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met	50	55	60	
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr	65	70	75	80
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg	85	90	95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly	100	105	110	
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<210> 3458
 <211> 61
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys
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<210> 3459
 <211> 592
 <212> DNA
 <213> Homo sapiens

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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35				40					45			
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
			50			55					60				
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65					70					75				80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90					95		
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100					105					110		
Leu	Lys	Leu													
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<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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<213> Homo sapiens

<400> 3462

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				20				25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
				35			40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
				50			55				60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70					75				80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
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Val	Ile	Thr	Val	His											
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<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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<210> 3464

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3464

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<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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<210> 3466

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3466

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Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
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Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
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Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
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Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
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Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
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Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
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Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
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Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
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Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
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Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
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Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
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Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
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Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
          225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
          245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
          275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
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Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
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<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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ggctctgaggt gaaggtccta ggagcatcag ttctctgttg ggatcaaggt tgctgggaca
180

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 360
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 420
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<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3468

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			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35				40						45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
	50					55					60				
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
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<210> 3469

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 3469

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<210> 3470

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3470

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      20           25           30
Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala
      35           40           45
Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
      50           55           60
Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys
      65           70           75           80
Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val
      85           90           95
Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe
      100          105          110
Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu
      115          120          125
Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu
      130          135          140
Phe Gly Tyr Ala Thr Thr Val Ile Pro Arg Val Tyr Thr Tyr Tyr Val
      145          150          155          160
Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly
      165          170          175
Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln
      180          185          190
Ala Glu Leu Lys Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu
      195          200          205
Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln
      210          215          220
Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr
      225          230          235          240
Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile
      245          250          255
Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr
      260          265          270
Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met
      275          280          285
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile
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<210> 3471

<211> 2335

<212> DNA

<213> Homo sapiens

<400> 3471

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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			20					25					30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
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Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
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Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
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Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
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Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120						125		
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
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Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
				165					170					175	
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
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Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
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Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
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Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly

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Lys	Leu	Ser	Val	Leu	Arg	Leu	Ser	Pro	Ser	Met	Gly	His	Pro	Leu	Glu		
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Val	Gly	Leu	Ala	Leu	Arg	His	Leu	Leu	Phe	Leu	Leu	Glu	Tyr	Cys	Met		
				260				265				270					
Val	Thr	Gly	Tyr	Asp	Trp	Trp	Asp	Ile	Leu	Leu	His	Val	Gln	Pro	Ser		
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Tyr	His	Thr	Lys	Leu	Phe	Leu	Ile	Ala	Ile	Ser	Ser	Thr	Leu	Lys	Ser		
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His	Ser	Phe	Leu	Arg	Asp	Gly	Thr	Ser	Leu	Gly	Met	Leu	Arg	Glu	Leu		
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Met	Val	Val	Ile	Arg	Ile	Trp	Gly	Leu	Leu	Lys	Pro	Ser	Cys	Leu	Pro		
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Ser	Glu	Pro	Asp	Glu	Ala	Leu	Val	Asp	Glu	Cys	Cys	Leu	Leu	Pro	Ser		
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Gln	Leu	Leu	Ile	Pro	Ser	Leu	Asp	Trp	Leu	Pro	Ala	Ser	Asp	Gly	Leu		
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Val	Ser	Arg	Leu	Gln	Pro	Lys	Gln	Pro	Leu	Arg	Leu	Gln	Phe	Gly	Arg		
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Ala	Pro	Thr	Leu	Pro	Gly	Ser	Ala	Ala	Thr	Leu	Gln	Leu	Asp	Gly	Leu		
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Leu	Gly	Ala	Cys	Pro	Thr	Glu	Glu	Cys	Lys	Ala	Cys	Thr	Arg	Cys	Gly		
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Cys	Val	Thr	Met	Leu	Lys	Ser	Pro	Asn	Arg	Thr	Thr	Ala	Val	Lys	Gln		
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Trp	Glu	Gln	Arg	Trp	Ile	Lys	Asn	Cys	Leu	Cys	Gly	Gly	Leu	Trp	Trp		
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<210> 3473

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 3473

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840
aaccctacg tcaagatctg tctcctgcc aaccagaaga actcaaagca gaccggggtc
900
aaacgcaaga cccagaagcc cgtgtttgag gagcgctaca ccttcgagat ccccttctg
960
gaggccaga ggaggacct gctcctgacc gtggtggatt ttgataagtt ctccgccac
1020
tgtgtcattg ggaaagtctc tgtgcctttg tgtgaagttg acctggtcaa gggcgggcac
1080
tgggtggaag cgctgattcc cagttctcag aatgaagtgg agctggggga gctgcttctg
1140
tcactgaatt atctcccaag tgctggcaga ctgaatgttg atgtcattcg agccaagcaa
1200
cttcttcaga cagatgtgag ccaaggttca gaccctttg tgaaaatcca gctggtgcat
1260
ggactcaaac ttgtgaaaac caagaagacg tccttcttaa ggggcacaat tgatcctttc
1320
tacaatgaat ccttcagctt caaagttccc caagaagaac tggaaaatgc cagcctagtg
1380
tttacagttt tcggccacaa catgaagagc agcaatgact tcatcgggag gatcgtcatt
1440
ggccagtact cttcaggccc ctctgagacc aaccactgga ggcgcatgct caacacgcac
1500

cgcacagccg tggagcagtg gcatagcctg aggtcccgag ctgagtgtga ccgcgtgtct
 1560
 cctgcctccc tggaggtgac ctgagggctg caggggaaggc agctttcatt tgtttaaaaa
 1620
 aaaaaagacg gaaaaaaatg tgtcacatac tattacatcc
 1660

<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

Met	Ala	Tyr	Ile	Gln	Leu	Glu	Pro	Leu	Asn	Glu	Gly	Phe	Leu	Ser	Arg
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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln
			20					25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
			35				40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
			50			55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65					70					75				80	
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115					120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
		130				135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
145					150					155					160
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
				165					170					175	
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
			180					185					190		
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
		195					200					205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
		210				215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225					230					235					240
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
				245					250					255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
			260					265					270		
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
		275					280					285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
		290				295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305					310					315				320	
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

325 330 335
 Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
 340 345 350
 Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
 355 360 365
 Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
 370 375 380
 Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
 385 390 395 400
 Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
 405 410 415
 Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
 420 425 430
 Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
 435 440 445
 Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
 450 455 460
 Arg Val Ser Pro Ala Ser Leu Glu Val Thr
 465 470

<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

acgcgtctgg agggctgggt cttctgcacg cccgcccgcg agctgctctg gctgggtgctg
 60
 cagcccttct tctactcact acggccgctc tgcgtccacc ccaaggccgt gaccgcgatg
 120
 gaggtgctca acacgctggg gcagctggcg gcgacactgg ccattcttgc ctttggggg
 180
 ctcaagcccg tgggtctacct gctggccagc tccttctctg gcttgggcct gcaccccatc
 240
 tcggggccact tcgtggccga gcactacatg ttcttcaagg gccacgagac ctactcctac
 300
 tatgggcctc tcaactggat caccttcaat gtgggctacc acgtggagca ccacgacttc
 360
 cccagcatcc cgggctacaa cctgccgctg gtgcggaaga tcgcgcccga gtactacgac
 420
 cacctgccgc agcaccactc ctgggtgaag gtgctctggg attttgtgtt tgaggactcc
 480
 ctggggccct atgccagggt gaagcgggtg taca
 514

<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
 1 5 10 15
 Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val


```

                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
      35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
      50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
      65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
      85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
      100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
      115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
      130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
      145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
                165                170

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<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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gcgcgctcgc gctgcctgcc cggcggtctc cgggtcctcg tccagaccgg ccaccggagc
60
ttgacctcct gcatcgaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa
120
gtggcctttg actttgctgc ccgagagatg gctccaaata tggcagagtg ggaccagaag
180
gtaggcgttt ttcttggtgt tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgtctccc gataatgtaa ttgttaaagt tctctccac ttaccaactc ttactgcaag
300
tgagaatacc ggtagtggat gatttttctt agaaggcatc ctgatcatct tgtaca
356

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<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

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Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
  1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
      20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
      35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
      50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

65              70              75              80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
              85              90              95
Ala Pro Val Ala Gly Leu Asp Glu Asp Pro Glu Thr Ala Gly Gln Ala
              100              105              110
Ala Glu Ala Arg
              115

```

<210> 3479

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3479

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nctttccaac ccagcctgaa ggggaaagcc acctcggagg acaccctcaa tctaaggaga
60
taccgccggt ctgacaggat catgctgcag aagtggcaga aaagggacat cagcaatttt
120
gagtatctca tgtacctcaa caccgcgggt gggagaacct gcaatgacta catgcagtac
180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaatccg
240
aagattttcc gggatctttc aaagcccatg ggggctcaga ccaaggaaag gaagctgaaa
300
tttatccaga ggtttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
360
tactacaccc actactctc ggccatcatc gtggcctcct acctgggtccg gatgccaccc
420
ttcaccagg ccttctgcgc tctgcagggt agctgctgcc actctctgta cacacacaca
480
cacacacaca cacacacata cgctgtatc acaagactaa gacctgtgct tgaacaaaga
540
caggatgcct ctgctaaaaa cttagtcatt agccagtgat tcccagttga cattgggtcc
600
aggattctgg ctcaccagcc aaggcagggt gttcttctc agttacacct gcacatctgc
660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
720
taacataaat aagatttagt ggaaaaagaa aaagcaggaa acttgagagac tagaaaggca
780
ggcgggtcaag gattaga
797

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<210> 3480

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3480

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Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
  1              5              10              15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
              20              25              30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

```

	35						40					45					
Ala	Ala	Gly	Arg	Thr	Cys	Asn	Asp	Tyr	Met	Gln	Tyr	Pro	Val	Phe	Pro		
	50					55					60						
Trp	Val	Leu	Ala	Asp	Tyr	Thr	Ser	Glu	Thr	Leu	Asn	Leu	Ala	Asn	Pro		
65					70					75					80		
Lys	Ile	Phe	Arg	Asp	Leu	Ser	Lys	Pro	Met	Gly	Ala	Gln	Thr	Lys	Glu		
				85					90					95			
Arg	Lys	Leu	Lys	Phe	Ile	Gln	Arg	Phe	Lys	Glu	Val	Glu	Lys	Thr	Glu		
			100					105					110				
Gly	Asp	Met	Thr	Ala	Gln	Cys	His	Tyr	Tyr	Thr	His	Tyr	Ser	Ser	Ala		
		115					120					125					
Ile	Ile	Val	Ala	Ser	Tyr	Leu	Val	Arg	Met	Pro	Pro	Phe	Thr	Gln	Ala		
	130					135				140							
Phe	Cys	Ala	Leu	Gln	Val	Ser	Cys	Cys	His	Ser	Leu	Tyr	Thr	His	Thr		
145					150					155					160		
His	Thr	His	Thr	His	Thr	Tyr	Ala	Cys	Ile	Thr	Arg	Leu	Arg	Pro	Val		
				165					170					175			
Leu	Glu	Gln	Arg	Gln	Asp	Ala	Ser	Ala	Lys	Asn	Leu	Val	Ile	Ser	Gln		
			180					185					190				

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<210> 3481
<211> 1794
<212> DNA
<213> Homo sapiens
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<400> 3481
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aaaagcccag cacttcccag agccaggggac tgacacaaca gaaagtctgc aagcaatgcc
120
atgaggtcct gaccagaggg tcttctgccca atgcctccaa gtggtcacca cctcagctct
180
gcagaccctg cggtgctggg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
ttcaccctct tcaagaagga gtacggctgt aagaattgtg gcaggngctt ctgttcaggc
300
tgcctaagct tcagtgcagc agtgccctcg actgggaaca cccaacagaa agtctgcaag
360
caatgccatg aggtcctgac cagaggggtct tctgccaatg cctccaagtg gtcaccacct
420
cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
agccaggggac tgacacgaca agaccagatg attgctgagc gcctagcacg actccgccag
540
gagaacaagc ccaagttagt cccctcacag gcagagatag aggcacgggt ggctgccta
600
aaggatgaac gtcaggggtc catcccttcc acccaggaaa tggaggcacg acttgcacgc
660
ttgcagggca gagttctacc ttctcaaacc cccagccccg gcacatcaca caccggacac
720
caggacccaa gcccagcaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
cgatgaaagc tggaaaggag gagggcccagc tgctctcttc cagaatgatc tcaaccaggg
840

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tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttggaga aggagaagag
 900
 cagactgctg gctgaggcag cacttgagtt gcgggaggag aacacgaggc aggaacggat
 960
 tctggccctg gccaaagcgac tagccatgct gcggggacag gaccccgaga gagtgaccct
 1020
 ccaggactat cgcctcccag acagtgatga cgacgaggat gaggagacag ccatccaaag
 1080
 agtcctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc
 1140
 tgcagagcag gcttctcgac cctggacgca accccgcggg gcagagcctg agggccagga
 1200
 tgtggacccc aggccctgagg ctgaggaaga ggagctcccc tggtgctgca tctgcaatga
 1260
 ggatgccacc ctacgctgcg ctggctgca tggggacctc ttctgtgccc gctgcttcg
 1320
 agagggccat gatgcctttg agcttaaaga gcaccagaca tctgcctact ctctccacg
 1380
 tgcaggccaa gagcactgaa gacaccctgg tcctcccga agggcagtc caccaggcagc
 1440
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact
 1500
 gatgatggat agggcccttc ctgagccttg gtgtccctgg aatgaggaaa gattctccat
 1560
 tcgagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa
 1620
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct
 1680
 ctagggcaca ggcccctccc ctggcactta gtgggtctaa taaagtatgt tgattcattg
 1740
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa
 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
		50					55				60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65					70					75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85					90					95		
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

115	120	125
Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu		
130	135	140
Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser		
145	150	155
Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu		
165	170	175
Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp		
180	185	190
Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser		
195	200	205

<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

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ncggccgcg cgcggaacgg cgcctcccg cccaccatgg gcaacagcgc gagccgcaac
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gacttcgagt gggctctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
120
aagtaccggg ccatcaaggc cctgatgcgg ccagaccggc gcctcaagtg ggcggggctg
180
gtgctggtgc tgggtgcagat gctggcctgc tggctggtgc ggcgggctggc ctggcgctgg
240
ctgctgttct gggcctacgc ctttgggtggc tgcgtgaacc actcgctgac gctggccatc
300
cacgacatct cgcacaacgc ggccttcggc acggggccgtg cggcacgcaa ccgctggctg
360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgccc cctccttcaa gaagtaccac
420
gtggaccacc accgctacct ggcggcgac ggactggacg tggacgtgcc cacgcgt
477

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<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

Met Gly Asn Ser Ala Ser Arg Asn Asp Phe Glu Trp Val Tyr Thr Asp	
1 5 10 15	
Gln Pro His Thr Gln Arg Arg Lys Glu Ile Leu Ala Lys Tyr Pro Ala	
20 25 30	
Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu	
35 40 45	
Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu	
50 55 60	
Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val	
65 70 75 80	
Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala	
85 90 95	
Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala	

	100		105		110										
Asn	Leu	Pro	Val	Gly	Val	Pro	Tyr	Ala	Ala	Ser	Phe	Lys	Lys	Tyr	His
	115					120					125				
Val	Asp	His	His	Arg	Tyr	Leu	Gly	Gly	Asp	Gly	Leu	Asp	Val	Asp	Val
	130					135					140				
Pro	Thr	Arg													
145															

<210> 3485

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3485

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60
tgcattgctta aaacatttaa ttttctatta tacagttaaa cttttgcttg aattcagtga
120
gtctaaaaaaa tcttattgtt ctcagggttag cagttagttg agcagagtcc attggtgaag
180
caatctagtt attggcaaat tctaacacat ggtaagggtgt gggggaaagg atttaaaata
240
acagaaaaaat gtaagtacaa acatacataa cagcaaaata aaactcactt taacaaaaat
300
ttatttataaa tgttaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaaggagg atgagggttt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtcag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcatacta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

<210> 3486

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3486

Met	Arg	Val	Pro	Ser	Ala	Leu	Val	Thr	Leu	His	Met	Leu	Leu	Cys	Ser
1				5				10						15	
Ile	Pro	Leu	Ser	Gly	Arg	Leu	Asp	Ser	Asp	Glu	Gln	Lys	Ile	Gln	Asn
		20						25					30		
Asp	Ile	Ile	Asp	Ile	Leu	Leu	Thr	Phe	Thr	Gln	Gly	Val	Asn	Glu	Lys

[illegible]

<210> 3487

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3487

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60
ccaagcaatc catcacacaa agagggggaaa gggtaatat ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagtgaa atatcctcaa tagcaatttt accaaagagg ctttcttctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggtcgtcac gcgtgtaatc ccagcacttt gggaggccga ggcagggtgga
360
tcacgaggtc aagaaatcga gaccagcctg gctaacacag tgaaaccccg tctcattctg
420
agcttcttga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtggt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgттаатсат гааасатттт гаттттттаа аааттттаас тасagtcaac cттаатттса
720
сататасаа таатсtgсат тtcccccaat cccgctgctc ttagagaagc tt
772

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<210> 3488

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3488

Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
1 5 10 15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

	20		25		30
Leu	Ala	Asn	Thr	Val	Lys
					Pro
					Arg
					Leu
					Ile
					Leu
					Ser
					Phe
					Leu
					Thr
					Pro
	35		40		45
Phe	Asn	Pro	Val	Thr	Glu
					Ile
					Ser
					Ile
					Cys
					Thr
	50		55		

<210> 3489
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 3489
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 120
 gcccagggtg ccccatggg cctggtggtt ggaggcagag ggtatccctt gcccaaattc
 180
 gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
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 288

<210> 3490
 <211> 90
 <212> PRT
 <213> Homo sapiens

Met	Gly	Ala	His	Leu	Leu	Pro	Gly	Pro	Gly	Arg	Pro	Gly	Arg	Pro	Gly
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Arg	Pro	Gly	Leu	Ala	Pro	Asn	Ser	Lys	Ala	His	Leu	Arg	Gly	Glu	Ile
			20					25					30		
Gln	Ala	Gln	Pro	Arg	Val	Pro	His	Glu	Ala	Trp	Trp	Leu	Glu	Ala	Glu
			35					40					45		
Gly	Ile	Pro	Cys	Pro	Asn	Ser	Cys	His	Ile	His	Ser	His	Trp	Glu	Ser
			50				55				60				
Tyr	Gly	Asp	Gly	Pro	Gly	Ala	Val	Ala	His	Thr	Cys	Asn	Pro	Ser	Thr
65					70					75				80	
Leu	Glu	Ser	Pro	Lys	Thr	Thr	Asp	His	Glu						
				85					90						

<210> 3491
 <211> 568
 <212> DNA
 <213> Homo sapiens

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 120
 aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
 180

tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgctgat
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 300
 acgcgaggag ctgggatggt ggtggactgg gagcaggaga ccggcctcct catgagctca
 360
 ggagacgtgc ggatcgtccg gatctgggac acagaccgtg agatgaagggt gcaggacatc
 420
 cctacgggcg cagacagctg tgtgacgagt ctgtcctgtg attcccaccg ctcactcatc
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 568

<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

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Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
			20						25					30	
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
			35				40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
			50				55				60				
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70					75				80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85						90					95	
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
			100					105					110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
			115				120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
			130				135				140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150					155				160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
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			180					185							

<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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120
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac
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aatgacccct cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac
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420
tctgacgatg atgagaaaat gcagaacaca gatgatgagg agaggcctca gctttccgat
480
gatgagagac aacagctatc tgaggaggaa aaggctaatt ctgatgatga acggccggtg
540
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600
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660
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720
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780
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840
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900
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960
gaagtagaaa tacccaaagt aaacactgat ttaggaaacg acttatattt tgttaaactg
1020
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1080
gaagatgaag aaatgctgga tgaagaaggt agaaccagggt taaaattaaa ggtagaaaat
1140
actataagat ggaggatacg ccgagatgaa gaaggaaatg aaattaaaga aagcaatgct
1200
cggatagtca agtggtcaga tggaagcatg tccctgcatt taggcaatga agtgtttgat
1260
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1320
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1560
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1620
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cgagaggaac gagccagaat ctattcatca gacagtgatg agggatcaga agaagataaa
 1740
 gctcaaagat tactcaaagc aaagaaactt accagtgatg aggaaggatga accttccgga
 1800
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 1860
 gatgaagagg aagaagatga tgattgaagt atgaaatatg aaaacatttt atatatttta
 1920
 ttgtacagtt ataaatatgt aaacatgagt tatttttgatt gaaatgaatc gatttgcttt
 1980
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 2040
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 2100
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 2220
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<210> 3494

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3494

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Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly	20	25	30	
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn	35	40	45	
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser	50	55	60	
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp	65	70	75	80
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	His	Ser	Glu	Ala	Glu	Gly	85	90	95	
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys	100	105	110	
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu	115	120	125	
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp	130	135	140	
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp	145	150	155	160
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp	165	170	175	
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp	180	185	190	
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser	195	200	205	
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp				

210	215	220
Asp Glu Glu Glu Gln Asp	His Lys Ser Glu Ser	Ala Arg Gly Ser Asp
225	230	235
Ser Glu Asp Glu Val Leu	Arg Met Lys Arg Lys	Asn Ala Ile Ala Ser
245	250	255
Asp Ser Glu Ala Asp Ser	Asp Thr Glu Val Pro Lys	Asp Asn Ser Gly
260	265	270
Thr Met Asp Leu Phe Gly	Gly Ala Asp Asp Ile Ser	Ser Gly Ser Asp
275	280	285
Gly Glu Asp Lys Pro Pro	Thr Pro Gly Gln Pro Val	Asp Glu Asn Gly
290	295	300
Leu Pro Gln Asp Gln Gln	Glu Glu Glu Pro Ile Pro	Glu Thr Arg Ile
305	310	315
Glu Val Glu Ile Pro Lys	Val Asn Thr Asp Leu Gly	Asn Asp Leu Tyr
325	330	335
Phe Val Lys Leu Pro Asn	Phe Leu Ser Val Glu Pro	Arg Pro Phe Asp
340	345	350
Pro Gln Tyr Tyr Glu Asp	Glu Phe Glu Asp Glu Glu	Met Leu Asp Glu
355	360	365
Glu Gly Arg Thr Arg Leu	Lys Leu Lys Val Glu Asn	Thr Ile Arg Trp
370	375	380
Arg Ile Arg Arg Asp Glu	Glu Gly Asn Glu Ile Lys	Glu Ser Asn Ala
385	390	395
Arg Ile Val Lys Trp Ser	Asp Gly Ser Met Ser Leu	His Leu Gly Asn
405	410	415
Glu Val Phe Asp Val Tyr	Lys Ala Pro Leu Gln Gly	Asp His Asn His
420	425	430
Leu Phe Ile Arg Gln Gly	Thr Gly Leu Gln Gly Gln	Ala Val Phe Lys
435	440	445
Ala Lys Leu Thr Phe Arg	Pro His Ser Thr Asp Ser	Ala Thr His Arg
450	455	460
Lys Met Thr Leu Ser Leu	Ala Asp Arg Cys Ser Lys	Thr Gln Lys Ile
465	470	475
Arg Ile Leu Pro Met Ala	Gly Arg Asp Pro Glu Cys	Gln Arg Thr Glu
485	490	495
Met Ile Lys Lys Glu Glu	Glu Arg Leu Arg Ala Ser	Ile Arg Arg Glu
500	505	510
Ser Gln Gln Arg Arg Met	Arg Glu Lys Gln His Gln	Arg Gly Leu Ser
515	520	525
Ala Ser Tyr Leu Glu Pro	Asp Arg Tyr Asp Glu Glu	Glu Glu Gly Glu
530	535	540
Glu Ser Ile Ser Leu Ala	Ile Lys Asn Arg Tyr Lys	Gly Gly Ile
545	550	555
Arg Glu Glu Arg Ala Arg	Ile Tyr Ser Ser Asp Ser	Asp Glu Gly Ser
565	570	575
Glu Glu Asp Lys Ala Gln	Arg Leu Leu Lys Ala Lys	Lys Leu Thr Ser
580	585	590
Asp Glu Glu Gly Glu Pro	Ser Gly Lys Arg Lys Ala	Glu Asp Asp Asp
595	600	605
Lys Ala Asn Lys Lys His	Lys Lys Tyr Val Ile Ser	Asp Glu Glu Glu
610	615	620
Glu Asp Asp Asp		
625		

<210> 3495
 <211> 1085
 <212> DNA
 <213> Homo sapiens

<400> 3495
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 120
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 180
 aagaaccggg atgagggcga gaagtttaaa ctcatatccc aggcatatga agtgctttca
 240
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc
 300
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 360
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 420
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag
 480
 aaatgtgaag gtgttggtgg gaagaagga tccgtggaga agtgcccgct gtgcaagggg
 540
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 660
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 720
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 780
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 840
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 900
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 960
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg
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 1085

<210> 3496
 <211> 337
 <212> PRT
 <213> Homo sapiens

<400> 3496
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Tyr His Pro Asp Lys Asn Pro Asp Glu Gly Glu Lys Phe Lys Leu Ile
 20 25 30
 35 40 45
 Ser Gln Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Asp Val Tyr
 50 55 60
 Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro
 65 70 75 80
 Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly
 85 90 95
 Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu
 100 105 110
 Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala
 115 120 125
 Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys
 130 135 140
 Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln
 145 150 155 160
 Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr
 165 170 175
 Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp
 180 185 190
 Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile
 195 200 205
 Ile Glu Val His Val Glu Lys Gly Met Lys Asp Gly Gln Lys Ile Leu
 210 215 220
 Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val
 225 230 235 240
 Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly
 245 250 255
 His Asp Leu Ile Met Lys Met Lys Ile Gln Leu Ser Glu Ala Leu Cys
 260 265 270
 Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile
 275 280 285
 Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val
 290 295 300
 Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile
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 325 330 335
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<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

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 ttttagtat atccttctaa aaagttttcc tgagaatttt tagtttgccc tctcaagttt
 180

ccttatttta ccttttctta aattacctcc ctccctcctt agtgaaatga gccttccttc
 240
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 660
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 720
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 780
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 840 aacttcagat atatacttta atgcacagag attcttttcc aaggtttttg 900
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 1020
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 1200
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 1638

<210> 3498

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3498

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          20           25           30
Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg
          35           40           45
Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
          50           55           60
Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
65           70           75           80
Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
          85           90           95
Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
          100          105          110
Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
          115          120          125
Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
          130          135          140
Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
145          150          155          160
Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
          165          170          175
Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
          180          185          190
Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
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Glu Ser
          210

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<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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240
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300
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420
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480
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540

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 600
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<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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Gly	Ala	Arg	Arg	Ser	Pro	Gly	Thr	Trp	Arg	Tyr	Arg	Gly	His	Ser	Ser
			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
		35					40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
	50				55					60					
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70					75				80	
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
			85					90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
		115					120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
	130					135					140				
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
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<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 691

<210> 3502
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 3502
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 20 25 30
 Glu Ile Lys Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala
 35 40 45
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn
 50 55 60
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile
 65 70 75 80
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala
 85 90 95
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu
 100 105 110
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met
 115 120 125
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu
 130 135 140
 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu
 145 150 155 160
 Lys His Ser Ala Glu Asn Asn Trp Ile Glu Glu Ala Thr Lys Arg Val
 165 170 175
 Pro Lys Leu Lys Lys Leu Asp Gly Thr Pro Val Ile Lys Gly Asp Glu
 180 185 190
 Glu Glu Asp Asn
 195

<210> 3503
 <211> 857
 <212> DNA
 <213> Homo sapiens

<400> 3503

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 120
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 180
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 720
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 780
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<210> 3504

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3504

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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50				55						60				
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
	65				70					75				80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90						95	
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
		100					105					110			
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
		115					120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130		135		140	
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145		150		155	160
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val Gln Glu Leu Phe Arg					
	165		170		175
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro					
	180		185		190
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly					
	195		200		205
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg					
	210		215		220
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln					
225		230		235	240
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala					
	245		250		255
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val					
	260		265		270
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp					
	275		280		285

<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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120
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240
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360
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840

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<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

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				20				25					30		
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala
				35			40					45			
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp
				50		55					60				
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe
65					70				75					80	
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala
				85				90					95		
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val
				100				105					110		
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile
				115			120					125			
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser
				130		135					140				
Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg
145					150				155					160	
Arg	Ala	Gln	Ser	Asn	Gly	Lys	Trp	Pro	Gln	Ile	Met	Ile	Phe	Pro	Glu

										165					170					175									
Gly	Thr	Cys	Thr	Asn	Arg	Thr	Cys	Leu	Ile	Thr	Phe	Lys	Pro	Gly	Ala														
				180					185					190															
Phe	Ile	Pro	Gly	Ala	Pro	Val	His	Pro	Gly	Val	Leu	Arg	Tyr	Pro	Asn														
				195					200					205															
Lys	Leu	Asp	Thr	Ile	Thr	Trp	Thr	Trp	Gln	Gly	Pro	Gly	Ala	Leu	Glu														
				210					215					220															
Ile	Leu	Trp	Leu	Thr	Leu	Cys	Gln	Phe	His	Asn	Gln	Val	Glu	Ile	Glu														
225					230					235					240														
Phe	Leu	Pro	Val	Tyr	Ser	Pro	Ser	Glu	Glu	Glu	Lys	Arg	Asn	Pro	Ala														
				245					250					255															
Leu	Tyr	Ala	Ser	Asn	Val	Arg	Arg	Val	Met	Ala	Glu	Ala	Leu	Gly	Val														
				260					265					270															
Ser	Val	Thr	Asp	Tyr	Thr	Phe	Glu	Asp	Cys	Gln	Leu	Ala	Leu	Ala	Glu														
				275					280					285															
Gly	Gln	Leu	Arg	Leu	Pro	Ala	Asp	Thr	Cys	Leu	Leu	Glu	Phe	Ala	Arg														
				290					295					300															
Leu	Val	Arg	Gly	Leu	Gly	Leu	Lys	Pro	Glu	Lys	Leu	Glu	Lys	Asp	Leu														
305					310					315					320														
Asp	Arg	Tyr	Ser	Glu	Arg	Ala	Arg	Met	Lys	Gly	Gly	Glu	Lys	Ile	Gly														
				325					330					335															
Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu	Val	Pro	Val	Ser	Asp	Leu	Leu														
				340					345					350															
Glu	Asp	Met	Phe	Ser	Leu	Phe	Asp	Glu	Ser	Gly	Ser	Gly	Glu	Val	Asp														
				355					360					365															
Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser	Val	Val	Cys	Trp	Pro	Ala	Arg														
				370					375					380															
Thr	Leu	Asp	Thr	Ile	Gln	Leu	Ala	Phe	Lys	Met	Tyr	Gly	Ala	Gln	Glu														
385					390					395					400														
Asp	Gly	Ser	Val	Gly	Glu	Gly	Asp	Leu	Ser	Cys	Ile	Leu	Lys	Thr	Ala														
				405					410					415															
Leu	Gly	Val	Ala	Glu	Leu	Thr	Val	Thr	Asp	Leu	Phe	Arg	Ala	Ile	Asp														
				420					425					430															
Gln	Glu	Glu	Lys	Gly	Lys	Ile	Thr	Phe	Ala	Asp	Phe	His	Arg	Phe	Ala														
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<210> 3507
<211> 885
<212> DNA
<213> Homo sapiens
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120
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<210> 3508

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508

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		20					25					30			
Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
	35				40						45				
Ala	Val	Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr
	50				55						60				
Asp	Arg	Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro
65				70					75					80	
Leu	Ser	Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu
		85				90							95		
Ser	Val	Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr
	100					105						110			
Ile	Trp	Pro	Asp	Lys	Glu	Met	Thr	Pro	Gly	Asn	Ile	Leu	Thr	Arg	Pro
	115				120							125			
Ala	Ser	Trp	Met	Ala	Val	Phe	Asn	Ala	Met	Pro	Thr	Ile	Cys	Phe	Gly
	130				135						140				
Phe	Gln	Cys	His	Val	Ser	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln
145				150						155				160	
Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

		165				170				175
Ala	Leu	Ala	Val	Tyr	Met	Gly	Thr	Gly	Ile	Cys
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Gly	Ala	Ala	Val	Asp	Pro	Asp				
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<210> 3509

<211> 331

<212> DNA

<213> Homo sapiens

<400> 3509

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331

<210> 3510

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3510

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Val	Ser	Trp	Thr	Ala	Leu	Val	His	Val	Lys	Ala	Glu	Tyr	Phe	Arg	Ser
			20					25						30	
Leu	Ala	His	Tyr	His	Val	Ala	Met	Ala	Leu	Cys	Asp	Gly	Ser	Pro	Thr
		35					40					45			
Glu	Gly	Glu	Leu	Pro	Thr	His	Glu	Gln	Val	Phe	Leu	Ser	Pro	Pro	Pro
	50					55				60					
Pro	Leu	Ser	Pro	Arg	Gly	Pro	Gly	Leu	Pro	Gln	Lys	Leu	Glu	Glu	Arg
65					70					75				80	
Arg	Gln	Leu	Gly	Lys	Ala	Pro	Met	Gly	Gly	Val	Pro	Trp	Gly	Ser	Asp
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<210> 3511

<211> 3319

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 3516

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Asp	Gln	Ile	Gln	Thr	Leu	Met	Leu	Gln	Asn	Arg	Thr	Leu	Leu	Glu	Gln
		35					40					45			
Asn	Met	Glu	Ser	Lys	Asp	Leu	Phe	His	Val	Glu	Gln	Arg	Gln	Tyr	Ile
	50					55					60				
Asp	Lys	Leu	Asn	Glu	Leu	Arg	Arg	Gln	Lys	Glu	Lys	Leu	Glu	Glu	Lys
65					70					75				80	
Ile	Met	Asp	Gln	Tyr	Lys	Phe	Tyr	Asp	Pro	Ser	Pro	Pro	Arg	Arg	Arg
			85					90					95		
Gly	Asn	Trp	Ile	Thr	Leu	Lys	Met	Arg	Lys	Leu	Ile	Lys	Ser	Lys	Lys
		100						105					110		
Asp	Ile	Asn	Arg	Glu	Arg	Gln	Lys	Ser	Leu	Thr	Leu	Thr	Pro	Thr	Arg
	115					120					125				
Ser	Asp	Ser	Ser	Glu	Gly	Phe	Leu	Gln	Leu	Pro	His	Gln	Asp	Ser	Gln
	130					135					140				
Asp	Ser	Ser	Ser	Val	Gly	Ser	Asn	Ser	Leu	Glu	Asp	Gly	Gln	Thr	Leu
145				150						155				160	
Gly	Thr	Lys	Lys	Ser	Ser	Thr	Met	Asn	Asp	Leu	Val	Gln	Ser	Met	Val
			165					170					175		
Leu	Ala	Gly	Gln	Trp	Thr	Gly	Ser	Thr	Glu	Asn	Leu	Glu	Val	Pro	Asp
	180							185					190		
Asp	Ile	Ser	Thr	Gly	Lys	Arg	Arg	Lys	Glu	Leu	Gly	Ala	Met	Ala	Phe
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Ser	Thr	Thr	Ala	Ile	Asn	Phe	Ser	Thr	Val	Asn	Ser	Ser	Ala	Gly	Phe
	210					215					220				
Arg	Ser	Lys	Gln	Leu	Val	Asn	Asn	Lys	Asp	Thr	Thr	Ser	Phe	Glu	Asp
225				230						235				240	
Ile	Ser	Pro	Gln	Gly	Val	Ser	Asp	Asp	Ser	Ser	Thr	Gly	Ser	Arg	Val
			245					250					255		
His	Ala	Ser	Arg	Pro	Ala	Ser	Leu	Asp	Ser	Gly	Arg	Thr	Ser	Thr	Ser
		260					265					270			
Asn	Ser	Asn	Asn	Asn	Ala	Ser	Leu	His	Glu	Val	Lys	Ala	Gly	Ala	Val

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Leu His Asp His Glu Ala Trp Ser Ser Ser Gly Ser Ser Pro Ile Gln		
305	310	315
Tyr Leu Lys Arg Gln Thr Arg Ser Ser Pro Val Leu Gln His Lys Ile		
	325	330
Ser Glu Thr Leu Glu Ser Arg His His Lys Ile Lys Thr Gly Ser Pro		
	340	345
Gly Ser Glu Val Val Thr Leu Gln Gln Phe Leu Glu Glu Ser Asn Lys		
	355	360
Leu Thr Ser Val Gln Ile Lys Ser Ser Ser Gln Glu Asn Leu Leu Asp		
	370	375
Glu Val Met Lys Ser Leu Ser Val Ser Ser Asp Phe Leu Gly Lys Asp		
385	390	395
Lys Pro Val Ser Cys Gly Leu Ala Arg Ser Val Ser Gly Lys Thr Pro		
	405	410
Gly Asp Phe Tyr Asp Arg Arg Thr Thr Lys Pro Glu Phe Leu Arg Pro		
	420	425
Gly Pro Arg Lys Thr Glu Asp Thr Tyr Phe Ile Ser Ser Ala Gly Lys		
	435	440
Pro Thr Pro Gly Thr Gln Gly Lys Ile Lys Leu Val Lys Glu Ser Ser		
	450	455
Leu Ser Arg Gln Ser Lys Asp Ser Asn Pro Tyr Ala Thr Leu Pro Arg		
465	470	475
Ala Ser Ser Val Ile Ser Thr Ala Glu Gly Thr Thr Arg Arg Thr Ser		
	485	490
Ile His Asp Phe Leu Thr Lys Asp Ser Arg Leu Pro Ile Ser Val Asp		
	500	505
Ser Pro Pro Ala Ala Ala Asp Ser Asn Thr Thr Ala Ala Ser Asn Val		
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<210> 3517

<211> 342

<212> DNA

<213> Homo sapiens

<400> 3517

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240
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342

<210> 3518

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3518

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Trp Pro Asp Pro Asp Phe Ser Ala Gly Arg Leu Cys Phe Pro Ser Ala
          20           25           30
Ile Val Ala Ser Phe Val Leu Ala Gly Glu Thr Glu Ala Thr Ala Leu
          35           40           45
Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala
          50           55           60
Ser Leu Ser Pro Ser Gly Leu Gly Ala Cys Asp Thr Ala Leu Arg Pro
65           70           75           80
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          85           90           95
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<210> 3519

<211> 2207

<212> DNA

<213> Homo sapiens

<400> 3519

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720
aaaccaactg tgatcagtga gtcagctcc cgcctgcagc agctgaacaa ggacacgcgt
780

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<210> 3520

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3520

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 35 40 45
 Arg Glu Glu Leu Ala Arg Ile Gly Leu Val Pro Pro Glu Glu Phe
 50 55 60
 Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser
 65 70 75 80
 Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
 85 90 95
 Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp
 100 105 110
 Thr Arg Ser Ser Ser Asp Pro His Leu Glu Thr Thr Ser Thr Ile Ser
 115 120 125
 Thr Val Ser Ser Met Ser Thr Leu Ser Ser Glu Ser Gly Glu Leu Thr
 130 135 140
 Asp Thr His Thr Ser Phe Ala Asp Gly His Thr Phe Leu Leu Glu Lys
 145 150 155 160
 Pro Pro Val Pro Pro Lys Pro Lys Leu Lys Ser Pro Leu Gly Lys Gly
 165 170 175
 Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu
 180 185 190
 Leu Met Ala Gln Gln His His Ala Ala Ser Ala Gly Leu Ala Ser Ala
 195 200 205
 Ala Gly Pro Ala Arg Pro Arg Tyr Leu Phe Gln Arg Arg Ser Lys Leu
 210 215 220
 Trp Gly Asp Pro Val Glu Ser Arg Gly Leu Pro Gly Pro Glu Asp Asp
 225 230 235 240
 Lys Pro Thr Val Ile Ser Glu Leu Ser Ser Arg Leu Gln Gln Leu Asn
 245 250 255
 Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser
 260 265 270
 Leu Leu Asp Pro Ala Lys Lys Ser Pro Ile Ala Ala Ala Arg Ser Pro
 275 280 285
 Leu Ser Ser Leu Gly Leu Gly Gly Trp Tyr Val Asp Ala Thr Ser
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<210> 3521

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3521

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 120
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 180
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 240

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 300
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 540
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<210> 3522

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

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			20					25					30		
Gln	His	Ala	Asp	Gln	Gly	Pro	Pro	Gly	Pro	His	Leu	Asp	Leu	His	Gln
		35				40						45			
Asp	Leu	Gln	Ala	Glu	Pro	Leu	Arg	Pro	Ala	Gly	Leu	Gly	Gly	Gly	Leu
		50				55					60				
Leu	Arg	Cys	Gly	Leu	Pro	Ser	Glu	Gln	Arg	Ala	Ala	Gly	Glu	Ala	Arg
65					70				75						80
Gly	Leu	His	Leu	Leu	Gln	Asp	Pro	Thr	Pro	Gly	Arg	Leu	Cys	Gln	Ala
			85					90						95	
Pro	Ala	Gly	Pro	Pro	Gly	Gly	Gly	His	Gly	Pro	Ala	Gly	Arg	Gly	Gln
		100				105							110		
Pro	Ser	Arg	His	Arg	Pro	Gly	Glu	Pro	Gln	Gly	Gly	Arg	Gly	Gly	Xaa
		115				120						125			
Pro	Asp	Pro	Ser	Thr	Pro	Ser	Val	Arg	Gly	Ser	Gln	Arg	Thr	Ala	Ser
		130				135					140				
Pro	Gly	Arg	Ala	Ser	Pro	Gly	Gly	Cys	Pro	Glu	Ala	Thr	Gly	Trp	Cys
145					150				155						160
Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
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<210> 3523

<211> 2614

<212> DNA

<213> Homo sapiens

<400> 3523

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180
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240
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300
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360
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420
gagctgcggg ccacagtga gcggatgggg ctcatgaagg ccaaccatgt cttcttctg
480
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780
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<210> 3524

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3524

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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
			20				25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
		35				40					45				
Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
	50				55				60						
Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
65				70				75						80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
			85				90						95		
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
		100					105					110			
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

		115					120					125			
His	Val	Phe	Phe	Leu	Leu	Tyr	Leu	Leu	His	Ile	Leu	Leu	Leu	Asp	Gly
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Leu	Leu	Cys	Ala	Val	Leu	Leu	Ser	Ala	Val	Gln	Ala	Gln	Ala	Gly	Trp
				165					170					175	
Leu	Gln	His	Asp	Phe	Gly	His	Leu	Ser	Val	Phe	Ser	Thr	Ser	Lys	Trp
			180					185					190		
Asn	His	Leu	Leu	His	His	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala	Pro
	195						200					205			
Ala	Ser	Trp	Trp	Asn	His	Met	His	Phe	Gln	His	His	Ala	Lys	Pro	Asn
	210					215						220			
Cys	Phe	Arg	Lys	Asp	Pro	Asp	Ile	Asn	Met	His	Pro	Phe	Phe	Phe	Ala
225				230						235					240
Leu	Gly	Lys	Ile	Leu	Ser	Val	Glu	Leu	Gly	Lys	Gln	Lys	Lys	Lys	Tyr
				245					250					255	
Met	Pro	Tyr	Asn	His	Gln	His	Lys	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro
			260					265					270		
Ala	Leu	Leu	Pro	Leu	Tyr	Phe	Gln	Trp	Tyr	Ile	Phe	Tyr	Phe	Val	Ile
	275						280					285			
Gln	Arg	Lys	Lys	Trp	Val	Asp	Leu	Val	Trp	Met	Ile	Thr	Phe	Tyr	Val
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Arg	Phe	Phe	Leu	Thr	Tyr	Val	Pro	Leu	Leu	Gly	Leu	Lys	Ala	Phe	Leu
305				310						315					320
Gly	Leu	Phe	Phe	Ile	Val	Arg	Phe	Leu	Glu	Ser	Asn	Trp	Phe	Val	Trp
				325					330					335	
Val	Thr	Gln	Met	Asn	His	Ile	Pro	Met	His	Ile	Asp	His	Asp	Arg	Asn
			340					345					350		
Met	Asp	Trp	Val	Ser	Thr	Gln	Leu	Gln	Ala	Thr	Cys	Asn	Val	His	Lys
	355						360					365			
Ser	Ala	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln	Ile	Glu
	370					375				380					
His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Tyr	His	Lys	Val	Ala
385				390						395					400
Pro	Leu	Val	Gln	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Ser
				405					410					415	
Lys	Pro	Leu	Leu	Ser	Ala	Phe	Ala	Asp	Ile	Ile	His	Ser	Leu	Lys	Glu
			420					425					430		
Ser	Gly	Gln	Leu	Trp	Leu	Asp	Ala	Tyr	Leu	His	Gln				
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<210> 3525

<211> 1116

<212> DNA

<213> Homo sapiens

<400> 3525

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<212> PRT

<213> Homo sapiens

<400> 3526

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<213> Homo sapiens

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<210> 3534
<211> 313
<212> PRT
<213> Homo sapiens

<400> 3534
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35 40 45
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys
50 55 60
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser
65 70 75 80
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg
85 90 95
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp
100 105 110
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile
115 120 125
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly
130 135 140
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys
145 150 155 160
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser
165 170 175
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser
180 185 190
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys
195 200 205
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser
210 215 220
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro
225 230 235 240
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser
245 250 255
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr
260 265 270
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr
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Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly
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Gly Phe Pro Leu Gly Pro Gln Cys Arg
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<210> 3535
<211> 723
<212> DNA
<213> Homo sapiens

<400> 3535

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<210> 3536

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3536

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 Arg Val Ser Leu Leu Leu Tyr Tyr Ile Ile His Gln Glu Glu Ile
 35 40 45
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu
 50 55 60
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser
 65 70 75 80
 Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp
 85 90 95
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser
 100 105 110
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu
 115 120 125
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln
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 Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

145
Leu Asn Arg

150

155

160

<210> 3537

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3537

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<210> 3538

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3538

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20          25          30
Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly
35          40          45
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
50          55          60
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
65          70          75          80
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
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Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

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<212> DNA
<213> Homo sapiens
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cgggggggcgg aggttgcagt gagccgagat cgcgcaggta cgctccagtc tgggcgacaa
180
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<210> 3540
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<212> PRT
<213> Homo sapiens
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<400> 3540
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      20             25             30
Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

```

```

      35          40          45
Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg
  50          55          60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys Asp Ser Val Ser
  65          70          75          80
Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile
      85          90          95
Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His Arg Val Val Val
      100          105          110
His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
      115          120          125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu
      130          135          140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu
      145          150          155          160
Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu
      165          170          175
Leu Lys Tyr Ser
      180

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<210> 3541

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3541

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300
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<210> 3542

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3542

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      20           25           30
Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp
      35           40           45
Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Leu Ser Ser Ile
      50           55           60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
      65           70           75           80
Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
      85           90           95
Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
      100          105          110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
      115          120          125
Ala Ala Ala Ala Leu Val Ala Ala Gly Asp Met Glu Gly Ala Val Gln
      130          135          140
Ala Tyr Val Ser Ala Leu Gln Pro Gly
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<210> 3543

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 3543

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660

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<210> 3544

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3544

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			20					25					30		
Lys	Ile	Val	Leu	Phe	Pro	His	Tyr	Glu	Glu	Gly	His	Ile	Pro	Gly	Ile
			35				40					45			
Leu	Ile	Ile	Ile	Phe	Tyr	Gly	Ile	Ser	Ile	Phe	Cys	Leu	Val	Ala	Leu
			50			55					60				
Val	Arg	Ala	Ser	Ile	Thr	Asp	Pro	Gly	Arg	Leu	Pro	Glu	Asn	Pro	Lys
65					70				75					80	
Ile	Pro	His	Gly	Glu	Arg	Glu	Phe	Trp	Glu	Leu	Cys	Asn	Lys	Cys	Asn
			85					90						95	
Leu	Met	Arg	Pro	Lys	Arg	Ser	His	His	Cys	Ser	Arg	Cys	Gly	His	Cys
			100					105					110		
Val	Arg	Arg	Met	Asp	His	His	Cys	Pro	Trp	Ile	Asn	Asn	Cys	Val	Gly
			115				120					125			
Glu	Asp	Asn	His	Trp	Leu	Phe	Leu	Gln	Leu	Cys	Phe	Tyr	Thr	Glu	Leu
			130			135					140				
Leu	Thr	Cys	Tyr	Ala	Leu	Met	Phe	Ser	Phe	Cys	His	Tyr	Tyr	Tyr	Phe
145					150					155					160
Leu	Pro	Leu	Lys	Lys	Arg	Asn	Leu	Asp	Leu	Phe	Val	Phe	Arg	His	Glu
			165					170						175	
Leu	Ala	Ile	Met	Arg	Leu	Ala	Ala	Phe	Met	Gly	Ile	Thr	Met	Leu	Val
			180					185					190		
Gly	Ile	Thr	Gly	Leu	Phe	Tyr	Thr	Gln	Leu	Ile	Gly	Ile	Ile	Thr	Pro
			195				200					205			
Cys	Ser	Leu	Ile	Leu	Leu	Lys	Cys	Gly	Ser	Val	Ser	Asn	Asn	Ser	Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala Leu Arg Ile Pro Ser		
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser Leu Arg Val Phe Asn Ser		240
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Val Lys Leu Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln Trp Ser Thr		255
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Lys

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<211> 3657

<212> DNA

<213> Homo sapiens

<400> 3545

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1140

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<211> 792

<212> PRT

<213> Homo sapiens

<400> 3546

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Leu	Ala	Asp	Pro	Gly	Trp	Ala	Ser	Ile	Ser	Arg	Gly	Val	Leu	Val	Cys
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Asp	Glu	Cys	Cys	Ser	Val	His	Arg	Ser	Leu	Gly	Arg	His	Ile	Ser	Ile
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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Leu	Leu	Asp	Pro	Ala	Gln	Val	Gln	Ser	Gly	Arg	Arg	Lys	Ala	Asn	Pro
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Gln	Asp	Lys	Val	His	Pro	Ile	Lys	Ser	Glu	Phe	Ile	Arg	Ala	Lys	Tyr
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Gln	Met	Leu	Ala	Phe	Val	His	Lys	Leu	Pro	Cys	Arg	Asp	Asp	Asp	Gly

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145	150	155
Gly Asn Leu Glu Thr	Cys Leu Arg Leu Leu Ser	Leu Gly Ala Gln Ala
165	170	175
Asn Phe Phe His Pro	Glu Lys Gly Thr Thr Pro	Leu His Val Ala Ala
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Lys Ala Gly Gln Thr	Leu Gln Ala Glu Leu Leu Val	Val Tyr Gly Ala
195	200	205
Asp Pro Gly Ser Pro	Asp Val Asn Gly Arg Thr	Pro Ile Asp Tyr Ala
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225	230	235
Tyr Glu Leu Thr Asp	Arg Leu Ala Phe Tyr Leu	Cys Gly Arg Lys Pro
245	250	255
Asp His Lys Asn Gly	His Tyr Ile Ile Pro	Gln Met Ala Asp Arg Ser
260	265	270
Arg Gln Lys Cys Met	Ser Gln Ser Leu Asp	Leu Ser Glu Leu Ala Lys
275	280	285
Ala Ala Lys Lys Lys	Leu Gln Ala Leu Ser	Asn Arg Leu Phe Glu Glu
290	295	300
Leu Ala Met Asp Val	Tyr Asp Glu Val Asp	Arg Arg Glu Asn Asp Ala
305	310	315
Val Trp Leu Ala Thr	Gln Asn His Ser Thr	Leu Val Thr Glu Arg Ser
325	330	335
Ala Val Pro Phe Leu	Pro Val Asn Pro Glu	Tyr Ser Ala Thr Arg Asn
340	345	350
Gln Gly Arg Gln Lys	Leu Ala Arg Phe Asn	Ala Arg Glu Phe Ala Thr
355	360	365
Leu Ile Ile Asp Ile	Leu Ser Glu Ala Lys	Arg Arg Gln Gln Gly Lys
370	375	380
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385	390	395
Ser Asp Leu Asp Asp	Gln His Asp Tyr Asp	Ser Val Ala Ser Asp Glu
405	410	415
Asp Thr Asp Gln Glu	Pro Leu Arg Ser Thr	Gly Ala Thr Arg Ser Asn
420	425	430
Arg Ala Arg Ser Met	Asp Ser Ser Asp Leu	Ser Asp Gly Ala Val Thr
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Leu Gln Glu Tyr Leu	Glu Leu Lys Lys Ala	Leu Ala Thr Ser Glu Ala
450	455	460
Lys Val Gln Gln Leu	Met Lys Val Asn Ser	Ser Leu Ser Asp Glu Leu
465	470	475
Arg Arg Leu Gln Arg	Glu His Phe Ala Pro	Ile Ile His Lys Leu Gln
485	490	495
Ala Glu Asn Leu Gln	Leu Arg Gln Pro Pro	Gly Pro Val Pro Thr Pro
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Pro Leu Pro Ser Glu	Arg Ala Glu His Thr	Pro Met Ala Pro Gly Gly
515	520	525
Ser Thr His Arg Arg	Asp Arg Gln Ala Phe	Ser Met Tyr Glu Pro Gly
530	535	540
Ser Ala Leu Lys Pro	Phe Gly Gly Pro Pro	Gly Asp Glu Leu Thr Thr
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Arg Leu Gln Pro Phe	His Ser Thr Glu Leu	Glu Asp Asp Ala Ile Tyr

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Ser	Val	His	Val	Pro	Ala	Gly	Leu	Tyr	Arg	Ile	Arg	Lys	Gly	Val	Ser																	
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Gln	Glu	Gly	Ser	Arg	His	Thr	Ser	Lys	Leu	Ser	Arg	His	Gly	Ser	Gly																	
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Ala	Asp	Ser	Asp	Tyr	Glu	Asn	Thr	Gln	Ser	Gly	Asp	Pro	Leu	Leu	Gly																	
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Leu	Glu	Gly	Lys	Arg	Phe	Leu	Glu	Leu	Gly	Lys	Glu	Glu	Asp	Phe	His																	
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Pro	Glu	Leu	Glu	Ser	Leu	Asp	Gly	Asp	Leu	Asp	Pro	Gly	Leu	Pro	Ser																	
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Thr	Glu	Asp	Val	Ile	Leu	Lys	Thr	Glu	Gln	Val	Thr	Lys	Asn	Ile	Gln																	
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Glu	Leu	Leu	Arg	Ala	Ala	Gln	Glu	Phe	Lys	His	Asp	Ser	Phe	Val	Pro																	
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Cys	Ser	Glu	Lys	Ile	His	Leu	Ala	Val	Thr	Glu	Met	Ala	Ser	Leu	Phe																	
705					710							715			720																	
Pro	Lys	Arg	Pro	Ala	Leu	Glu	Pro	Val	Arg	Ser	Ser	Leu	Arg	Leu	Leu																	
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Asn	Ala	Ser	Ala	Tyr	Arg	Leu	Gln	Ser	Glu	Cys	Arg	Lys	Thr	Val	Pro																	
				740							745			750																		
Pro	Glu	Pro	Gly	Ala	Pro	Val	Asp	Phe	Gln	Leu	Leu	Thr	Gln	Gln	Val																	
				755							760			765																		
Ile	Gln	Cys	Ala	Tyr	Asp	Ile	Ala	Lys	Ala	Ala	Lys	Gln	Leu	Val	Thr																	
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<211> 1039
<212> DNA
<213> Homo sapiens
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180
gcttggtggac ggcagcacac ttctgctttt gttccttcat caggacgaat ttactctttt
240
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420
agtccccaga actgtgggcc accagatgac ttcagatgtc ccaatccgac aaagcagatc
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tggacagtga atgaagctct aattcagaaa tggctgagct atccttcttg aaggttttct
540

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 720
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<210> 3548

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3548

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			20					25					30		
Gly	Gln	Leu	Gly	His	Asn	Ser	Thr	Ser	His	Glu	Ile	Asn	Pro	Arg	Lys
		35					40					45			
Val	Phe	Glu	Leu	Met	Gly	Ser	Ile	Val	Thr	Glu	Ile	Ala	Cys	Gly	Arg
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Gln	His	Thr	Ser	Ala	Phe	Val	Pro	Ser	Ser	Gly	Arg	Ile	Tyr	Ser	Phe
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Gly	Leu	Gly	Gly	Asn	Gly	Gln	Leu	Gly	Thr	Gly	Ser	Thr	Ser	Asn	Arg
				85				90						95	
Lys	Ser	Pro	Phe	Thr	Val	Lys	Gly	Asn	Trp	Tyr	Pro	Tyr	Asn	Gly	Gln
			100					105					110		
Cys	Leu	Pro	Asp	Ile	Asp	Ser	Glu	Glu	Tyr	Phe	Cys	Val	Lys	Arg	Ile
		115					120					125			
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	130					135					140				
Cys	Gly	Pro	Pro	Asp	Asp	Phe	Arg	Cys	Pro	Asn	Pro	Thr	Lys	Gln	Ile
145					150					155				160	
Trp	Thr	Val	Asn	Glu	Ala	Leu	Ile	Gln	Lys	Trp	Leu	Ser	Tyr	Pro	Ser
			165					170						175	
Gly	Arg	Phe	Pro	Val	Glu	Ile	Ala	Asn	Glu	Ile	Asp	Gly	Thr	Phe	Ser
			180					185					190		
Ser	Ser	Gly	Cys	Leu	Asn	Gly	Ser	Phe	Leu	Ala	Val	Ser	Asn	Asp	Asp
		195					200					205			
His	Tyr	Arg	Thr	Gly	Thr	Arg	Phe	Ser	Gly	Val	Asp	Met	Asn	Ala	Ala
	210					215					220				
Arg	Leu	Leu	Phe	His	Lys	Leu	Ile	Gln	Pro	Asp	His	Pro	Gln	Ile	Ser

225					230					235					240
Gln	Gln	Val	Ala	Ala	Ser	Leu	Glu	Lys	Asn	Leu	Ile	Pro	Lys	Leu	Thr
				245					250					255	
Ser	Ser	Leu	Pro	Asp	Val	Glu	Ala	Leu	Arg	Phe	Tyr	Leu	Thr	Leu	Pro
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Glu	Cys	Pro	Leu	Met	Ser	Asp	Ser	Asn	Asn	Phe	Ile	Thr	Ile	Ala	Ile
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Pro	Phe	Gly	Thr	Ala	Leu	Val	Asn	Leu	Glu	Lys	Ala	Pro	Leu	Lys	Val
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Leu	Glu	Asn	Trp	Trp	Ser	Val	Leu	Glu	Pro	Pro	Leu	Phe	Leu	Lys	Ile
305					310					315					320
Val	Glu	Leu	Phe	Lys	Glu	Val	Val	Val	His	Leu	Leu	Lys	Leu	Tyr	Lys
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<211> 2542

<212> DNA

<213> Homo sapiens

<400> 3549

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960

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2542

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 3550

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 35 40 45
 Ser Lys Glu Lys Glu Arg Ala Ser Leu Asp Lys Lys Arg Asp Lys Asp
 50 55 60
 Tyr Arg Arg Lys Glu Ile Leu Pro Phe Glu Lys Met Lys Glu Gln Arg
 65 70 75 80
 Leu Arg Glu His Leu Val Arg Phe Glu Arg Leu Arg Arg Ala Met Glu
 85 90 95
 Leu Arg Arg Arg Arg Glu Ile Ala Glu Arg Glu Arg Arg Glu Arg Glu
 100 105 110
 Arg Ile Arg Ile Ile Arg Glu Arg Glu Glu Arg Glu Arg Leu Gln Arg
 115 120 125
 Glu Arg Glu Arg Leu Glu Ile Glu Arg Gln Lys Leu Glu Arg Glu Arg
 130 135 140
 Met Glu Arg Glu Arg Leu Glu Arg Glu Arg Ile Arg Ile Glu Gln Glu
 145 150 155 160
 Arg Arg Lys Glu Ala Glu Arg Ile Ala Arg Glu Arg Glu Glu Leu Arg
 165 170 175
 Arg Gln Gln Gln Gln Leu Arg Tyr Glu Gln Glu Lys Arg Asn Ser Leu
 180 185 190
 Lys Arg Pro Arg Asp Val Asp His Arg Arg Asp Asp Pro Tyr Trp Ser
 195 200 205
 Glu Asn Lys Lys Leu Ser Leu Asp Thr Asp Ala Arg Phe Gly His Gly
 210 215 220
 Ser Asp Tyr Ser Arg Gln Gln Asn Arg Phe Asn Asp Phe Asp His Arg
 225 230 235 240
 Glu Arg Gly Arg Phe Pro Glu Ser Ser Ala Val Gln Ser Ser Ser Phe
 245 250 255
 Glu Arg Arg Asp Arg Phe Val Gly Gln Ser Glu Gly Lys Lys Ala Arg
 260 265 270
 Pro Thr Ala Arg Arg Glu Asp Pro Ser Phe Glu Arg Tyr Pro Lys Asn
 275 280 285
 Phe Ser Asp Ser Arg Arg Asn Glu Pro Pro Pro Pro Arg Asn Glu Leu
 290 295 300
 Arg Glu Ser Asp Arg Arg Glu Val Arg Gly Glu Arg Asp Glu Arg Arg
 305 310 315 320
 Thr Val Ile Ile His Asp Arg Pro Asp Ile Thr His Pro Arg His Pro
 325 330 335
 Arg Glu Ala Gly Pro Asn Pro Ser Arg Pro Thr Ser Trp Lys Ser Asp
 340 345 350
 Gly Ser Met Ser Thr Asp Lys Arg Glu Thr Arg Val Glu Arg Pro Glu
 355 360 365
 Arg Ser Gly Arg Glu Val Ser Gly His Ser Val Arg Gly Ala Pro Pro

370		375		380
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385		390		395
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu				
	405		410	415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys				
	420		425	430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg				
	435		440	445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser				
	450		455	460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser				
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 <213> Homo sapiens

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 <211> 55
 <212> PRT
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Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Cys	Leu
	35		40		45										
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<210> 3553

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 3553

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 180
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 240
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 300
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 480
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<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

Tyr	Thr	Val	Thr	Met	Asp	Val	His	Ser	Arg	Tyr	Arg	Thr	Glu	Ala	His
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Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
	35						40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70					75				80	
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85					90					95		
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
		100						105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
		115					120						125		
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135					140				
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145					150					155				160	
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
		180						185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
	195					200						205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser
225				230						235				240	
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
			245					250					255		
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
		260						265					270		
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
		275					280					285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290					295					300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305					310					315				320	
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

[illegible]

<210> 3555.

<211> 1038

<212> DNA

<213> Homo sapiens

<400> 3555

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120	atgaaccagg	cgttgcagag	gcgcttcgcc	aaggggggtg	agtacaacat
180	atccggggag	acaggaacac	gggcaagaca	gcgctgtggc	accgcctgca
240	ttcgtggagg	agtacatccc	cacacaggag	atccagggtc	ccagcatcca
300	aagaccacgg	atgacatcgt	gaagggttga	gtctgggatg	tagtagacaa
360	aaaaagcgag	gcgacggctt	aaagatggag	aacgaccccc	aggaggcgga
420	gccttgatg	ctgagttcct	ggacgtgtac	aagaactgca	acgggggtgt
480	gacattacca	agcagtggac	cttcaattac	attctccggg	agcttccaaa
540	cacgtgccag	tgtgcgtgct	ggggaactac	cgggacatgg	gcgagcaccg
600	tgccggacgn	acgtgcgtga	cttcacgcac	aacctggaca	gacctccagg
660	ttccgctatg	ctgagtcctc	catgaagaac	agcttcggcc	taaagtacct
720	ttcaatatcc	catttttgca	gcttcagagg	gagacgctgt	tgcggcagct
780	cagctggaca	tggacgccac	gctggaggag	ctgtcgggtg	agcaggagac
840	aactacggca	tcttcctgga	gatgatggag	gctcgcagcc	gtggccatgc
900	gcggccaacg	ggcagagccc	atccccgggc	tcccagtcac	cagtgggtgc
960	gtgtccacgg	ggagctccag	ccccggcaca	gccagccccg	ccccacagct
1020					gcccctcaat

ggttgccccca ccatacctc
1038

<210> 3556
<211> 333
<212> PRT
<213> Homo sapiens

<400> 3556
Met Phe Ser Ala Leu Lys Lys Leu Val Gly Ser Asp Gln Ala Pro Gly
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Arg Asp Lys Asn Ile Pro Ala Gly Leu Gln Ser Met Asn Gln Ala Leu
20 25 30
Gln Arg Arg Phe Ala Lys Gly Val Gln Tyr Asn Met Lys Ile Val Ile
35 40 45
Arg Gly Asp Arg Asn Thr Gly Lys Thr Ala Leu Trp His Arg Leu Gln
50 55 60
Gly Arg Pro Phe Val Glu Glu Tyr Ile Pro Thr Gln Glu Ile Gln Val
65 70 75 80
Thr Ser Ile His Trp Ser Tyr Lys Thr Thr Asp Asp Ile Val Lys Val
85 90 95
Glu Val Trp Asp Val Val Asp Lys Gly Lys Cys Lys Lys Arg Gly Asp
100 105 110
Gly Leu Lys Met Glu Asn Asp Pro Gln Glu Ala Glu Ser Glu Met Ala
115 120 125
Leu Asp Ala Glu Phe Leu Asp Val Tyr Lys Asn Cys Asn Gly Val Val
130 135 140
Met Met Phe Asp Ile Thr Lys Gln Trp Thr Phe Asn Tyr Ile Leu Arg
145 150 155 160
Glu Leu Pro Lys Val Pro Thr His Val Pro Val Cys Val Leu Gly Asn
165 170 175
Tyr Arg Asp Met Gly Glu His Arg Val Ile Xaa Cys Arg Thr Xaa Val
180 185 190
Arg Asp Phe Ile Asp Asn Leu Asp Arg Pro Pro Gly Ser Ser Tyr Phe
195 200 205
Arg Tyr Ala Glu Ser Ser Met Lys Asn Ser Phe Gly Leu Lys Tyr Leu
210 215 220
His Lys Phe Phe Asn Ile Pro Phe Leu Gln Leu Gln Arg Glu Thr Leu
225 230 235 240
Leu Arg Gln Leu Glu Thr Asn Gln Leu Asp Met Asp Ala Thr Leu Glu
245 250 255
Glu Leu Ser Val Gln Gln Glu Thr Glu Asp Gln Asn Tyr Gly Ile Phe
260 265 270
Leu Glu Met Met Glu Ala Arg Ser Arg Gly His Ala Ser Pro Leu Ala
275 280 285
Ala Asn Gly Gln Ser Pro Ser Pro Gly Ser Gln Ser Pro Val Val Pro
290 295 300
Ala Gly Ala Val Ser Thr Gly Ser Ser Ser Pro Gly Thr Ala Gln Pro
305 310 315 320
Ala Pro Gln Leu Pro Leu Asn Gly Cys Pro Thr Ile Leu
325 330

<210> 3557
<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

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 60
 ccggcattga tcaagtccat ctgggctatg gccataagcc aacaccagtt ctatctggac
 120
 agaaagcaga gtaagtccaa aatccatgca gcacgcagcc tgagtgagat cgccatcgac
 180
 ctgaccgaga cggggacgct gaagacctcg aagctggcca acatgggtag caaggggaag
 240
 atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc
 300
 attctactcc caggttctca ggaatcagat agctcgcagt cggccaagaa ggacatgctg
 360
 gctgccttga agtccaggca ggaagctctg gaggaaaccc tgcgtcagag gctggaggaa
 420
 ctgaagaagc tgtgtctccg agaagctgag ctacacggga agctgccagt agaatatccc
 480
 ctggat
 486

<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
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Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40				45				
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50					55					60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65					70					75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90						95	
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115					120					125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130					135					140				
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145					150					155					160
Leu	Asp														

<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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 120
 gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct
 180
 actttcaaat ttgaatcaac agatgaagat aaaagaaaga aactctgtga aggcatttt
 240
 aaagtcctta taaaggacat cccaacaaca tgtcaagtgt cctgcctgga agtactccgc
 300
 attctctcca gagacaaaaa ggtttttagtt cctgtgacaa ctaaggaaaa tatgcagata
 360
 ctgctgcgac tagccaagct aaatgagtta gatgattctt tggagaaagt atcagagttc
 420
 ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca
 480
 cagcagctca gcctggaact taatcttgc gcaaagctct gtaacctct gagaaagtgc
 540
 aaggaccgga aatttatcaa tgacattaag tgctttgact tgcgcttgct cttccttctg
 600
 tcacttttgc acaccgacat caggtcacaa ttgcgctatg agtccaggg actaccgctg
 660
 ctaacgcaga tcg
 673

<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

Met	Asp	Glu	Glu	Arg	Ala	Leu	Tyr	Ile	Val	Arg	Ala	Gly	Glu	Ala	Gly
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Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr
			20					25				30			
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu
		35					40					45			
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val
	50					55				60					
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu
65					70					75				80	
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala
				85					90					95	
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro
		100					105					110			
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser
		115					120					125			
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu
	130					135					140				
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile

145 150 155 160
 Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr
 165 170 175
 Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu
 180 185 190
 Thr Gln Ile
 195

<210> 3561
 <211> 523
 <212> DNA
 <213> Homo sapiens

<400> 3561
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 ggctcacaga gctgactcag aagggccatt gtcacacact ggtaagagct gattctgagg
 120
 ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
 180
 gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgaggtgatg
 240
 ctggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcagggttc
 300
 tccatgttga tgggcttttc agacttgatt ggctgcgtac agaagagatg gaggggtggg
 360
 caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtgg
 420
 aagcggaggt ttggtgggtg ttttctactt tgacttctca ttgcactaaa catacaactc
 480
 tccaggtga cggggaagag gagtggggca aaggggtgtg cac
 523

<210> 3562
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 3562
 Met His Val Ala Thr Glu Asp Ala Arg Arg Gly Asp Ala Gly Leu Ile
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 Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val
 20 25 30
 Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
 35 40 45
 Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
 50 55 60
 Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
 65 70 75 80
 Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
 85 90 95
 Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
 100 105

<210> 3563
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 3563
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 60
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 120
 cccctgccgc cgtcgacggg gccccagtg ggcgcgggccc tggacgcgga gcagcgcacg
 180
 gtgttcgcct tcgtgctctg cctgctcgtg gtgctggtgc tgttgatggt gcgctgcgtg
 240
 cgcacccctgc tcgacccta cagccgcagc cccgcctcgt cctggaccga ccacaaggag
 300
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 359

<210> 3564
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3564
 Met Ser Ala Thr Trp Thr Leu Ser Pro Glu Pro Leu Pro Pro Ser Thr
 1 5 10 15
 Gly Pro Pro Val Gly Ala Gly Leu Asp Ala Glu Gln Arg Thr Val Phe
 20 25 30
 Ala Phe Val Leu Cys Leu Leu Val Val Leu Val Leu Leu Met Val Arg
 35 40 45
 Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser
 50 55 60
 Trp Thr Asp His Lys Glu Ala Leu Glu Arg Gly Gln Phe Asp Tyr Ala
 65 70 75 80
 Leu Val

<210> 3565
 <211> 580
 <212> DNA
 <213> Homo sapiens

<400> 3565
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 cgtgagcagg cacaggagac cttccgcgcc gccggccggg cgaccccgca ggaagtagga
 120
 aggacgagcg cgcacttcaa gtcccagaag ccccggtttc ctggagcccc cgccgtgccg
 180
 cgctacgccc gccgggagcc gggcagagcg gccaaagtgt cgcagcccaa gaaaagaaa
 240
 cttgagtcgg ggggcggcgc cgaaggaggg gaggggaactg aagaggaaga tggcgcggag
 300

cgggagggcgg ccctggagcg accccggacg actaagcggg aacgggacca gctgtactac
 360
 gagtgtact cggacgtttc ggtccacgag gagatgatcg cggaccgcgt ccgcaccgat
 420
 gcctaccgct gggtttccct tccgaactgg gcagcactgc gaggcaagac ggtactggac
 480
 gtgggcgcgg gcaccggcat tctgagcatc ttctgtgcc aggccggggc cgggcgcgtg
 540
 tacgcggtag aggccagcgc catctggcaa caggcccggg
 580

<210> 3566

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3566

Thr	Arg	Arg	Gly	Trp	Glu	Lys	Gly	Cys	Gln	Asp	Thr	Arg	Arg	Ala	Ile
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Gln	Asn	Ser	Ser	Arg	Glu	Gln	Ala	Gln	Glu	Thr	Phe	Arg	Ala	Ala	Gly
			20					25					30		
Arg	Ala	Thr	Pro	Gln	Glu	Val	Gly	Arg	Thr	Ser	Ala	His	Phe	Lys	Ser
		35					40					45			
Gln	Lys	Pro	Pro	Phe	Pro	Gly	Ala	Arg	Ala	Val	Pro	Arg	Tyr	Ala	Arg
	50					55				60					
Arg	Glu	Pro	Gly	Arg	Ala	Ala	Lys	Met	Ser	Gln	Pro	Lys	Lys	Arg	Lys
65					70					75				80	
Leu	Glu	Ser	Gly	Gly	Gly	Ala	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	Glu
			85						90					95	
Asp	Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Thr	Thr	Lys
			100					105					110		
Arg	Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	Tyr	Ser	Asp	Val	Ser	Val
		115					120					125			
His	Glu	Glu	Met	Ile	Ala	Asp	Arg	Val	Arg	Thr	Asp	Ala	Tyr	Arg	Trp
	130					135					140				
Val	Ser	Leu	Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	Asp
145					150					155				160	
Val	Gly	Ala	Gly	Thr	Gly	Ile	Leu	Ser	Ile	Phe	Cys	Ala	Gln	Ala	Gly
			165						170					175	
Ala	Arg	Arg	Val	Tyr	Ala	Val	Glu	Ala	Ser	Ala	Ile	Trp	Gln	Gln	Ala
			180					185						190	

Arg

<210> 3567

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 3567

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 120

ataagcaggt ggaagagatc ctccgtctgg agaaagaaat cgaggacctg cagcgcatga
180
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240
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300
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360
aaaagggagc aagaagaaaa gaagaaacag gaagaggaag aaaagaagaa acgggaggaa
420
gaagaaagag aaagagagag agagcgaaga gaagccgagc tccgcgcca gcaggaagaa
480
gaaacgagga agcagcaaga actcgaagcc ttgcagaaga gccagaagga agctgaactg
540
acccgtgaac tggagaaaca gaagaaaaat aagcaggtgg aagagatcct ccgtctggag
600
aaagaaatcg aggacctgca gcgcatgaag gagcagcagg agctgtcgct gaccgaggct
660
tcctgcaga agctgcagga gcggcgggac caggagctcc gcaggctgga ggaggaagcg
720
tgcagggcgg cccaggagtt cctcgagtcc ctcaatttcg acgagatcga cgagtgtgtc
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840
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900
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960
cactcagacc agcgaacaag tggcatccgg accagcgatg actcttcaga ggaggacca
1020
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1080
ccatcagtgc aggactccgg gagcctacac aactcctcca gcggcgagtc cacctactgc
1140
atgccccaga acgctgggga cttgccctcc ccagacggcg actacgacta cgaccaggat
1200
gactatgagg acggtgccat cacttcgggc agcagcgtga ccttctccaa ctctacggc
1260
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1320
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1380
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1560
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1620
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1680
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1740

aaggagaatg ggatcgacat cattatggcc gataggactt tccacctgat tgcagagtcc
1800
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1920
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1980
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2040
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2100
gtgagaggat ggttgcacaa agaggtgaag aacagtccaa agatgtcttc actgaaactg
2160
aagaaacggg ggtttgtact caccacaat tccctggatt actacaagag ttcagagaag
2220
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2280
gagaagatat tcaaagagac aggctactgg aacgtcaccc tgtacgggcg caagcactgt
2340
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2400
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2460
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2520
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2580
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<211> 869

<212> PRT

<213> Homo sapiens

<400> 3568

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Thr	Arg	Glu	Leu	Glu	Lys	Gln	Lys	Glu	Asn	Lys	Gln	Val	Glu	Glu	Ile												
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Gln	Glu	Phe	Leu	Glu	Ser	Leu	Asn	Phe	Asp	Glu	Ile	Asp	Glu	Cys	Val												
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Tyr	Met	Asn	Asp	Thr	Val	Val	Pro	Thr	Ser	Pro	Ser	Ala	Asp	Ser	Thr												
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Val	Leu	Leu	Ala	Pro	Ser	Val	Gln	Asp	Ser	Gly	Ser	Leu	His	Asn	Ser												
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	755	760
Pro Ile Leu Arg Tyr Thr His His Pro Leu His Ser Pro Leu Leu Pro		765
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Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln		800
	805	810
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<211> 5070

<212> DNA

<213> Homo sapiens

<400> 3569

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 Pro Gly Ser Leu Pro Leu Ser Ile Ala Arg Val Gln Thr Pro Pro Trp
 50 55 60
 His Pro Pro Gly Ala Pro Ser Pro Gly Leu Leu Gln Asp Ser Asp Ser
 65 70 75 80
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 85 90 95
 Pro His Gln Gln Asn Lys Trp Ala Thr Leu Tyr Asp Ala Asn Tyr Lys
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 Glu Leu Pro Met Leu Thr Tyr Arg Val Asp Ala Asp Lys Gly Phe Asn
 115 120 125
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 Gln Val Thr Val Tyr Ile Gly Met Leu Gly Glu Pro Lys Tyr Val Lys
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 Gly Val Lys Leu Glu Ala Leu Asn Gln Ser Ile Asn Ile Glu Gln Ser
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 Gln Ser Asp Arg Ser Lys Arg Pro Phe Asn Pro Val Thr Val Asn Leu
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 Glu Thr Thr Ala Asn Asn Met Arg Lys Lys Gly Lys Pro Asn Pro Asp
 225 230 235 240
 Gln Arg Tyr Phe Met Leu Val Val Ala Leu Gln Ala His Ala Gln Asn
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 Gln Asn Tyr Thr Leu Ala Ala Gln Ile Ser Glu Arg Ile Ile Val Arg
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 275 280 285
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 305 310 315 320
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 Val Gln Glu Val Asp Thr Thr Glu Gln Leu Lys Arg Ile Ser Arg Met

340 345 350
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 Ile Glu Ala Thr Ala Pro Glu Thr Gly Val Ile Ala Gln Glu Val Lys
 370 375 380
 Glu Ile Leu Pro Glu Ala Val Lys Asp Thr Gly Asp Met Val Phe Ala
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 420 425 430
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 450 455 460
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785		790		800
Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu				
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Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro				
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Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp				
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Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val				
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 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His

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Leu Leu Val Leu Gly	Leu Tyr Leu Gly Pro Gln	Pro Asp Ser Arg Pro
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Ala Leu Leu Pro Gln Val	Ser Thr Gln Val Ala Gln	Ala Ala Leu Arg
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1236

<210> 3574

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3574

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			20					25					30		
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
			35				40					45			
Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
	50					55					60				
Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
65					70					75					80
Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
				85					90					95	
Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
			100					105					110		
Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
			115				120					125			
Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
			130			135					140				
Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
145					150					155					160
Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
				165					170					175	
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
			180					185					190		
Arg	Leu	Arg	Ala	Gly	Thr	Gln	Ser	Cys	Leu	Cys	Ile	Leu	Ser	His	Leu
		195				200						205			
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
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Leu	Ala	Gln	Asp	Gln	Val	Thr	Glu	Ala	Glu	Glu	Leu	Leu	Gln	Asn	Leu
225					230					235					240
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
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Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
			260					265					270		
Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
			275				280						285		
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290					295					300				
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310					315					320
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
				325					330					335	
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
			340					345					350		
Arg	Asp	Lys	Gly	Ala	Asp	Ser	Leu	Leu							

355

360

<210> 3575
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 3575
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 120
 cagtcaaagg tgctggagtt gtgtctgtat agaagtaagt cgtcccacca acagtttctt
 180
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 300
 gagaagtatg tggagtaatc ttgggggaat gaagagggga agaccagca gacaacgaca
 360
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 420
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 480
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 540
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 600
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 660
 atttaataaa ttaatggaag agtgggaagt aacagaattg tggctcttta taaaattatg
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 769

<210> 3576
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 3576
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 Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr
 35 40 45
 Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe
 50 55 60
 Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe
 65 70 75 80
 Thr Ser Ser Ser Gly Met Ser Leu Ser Ala Gly Ser Ser Pro Leu His
 85 90 95
 Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Arg Ser

			100					105					110		
His	Thr	Pro	Asn	Pro	Ala	Ser	Tyr	Met	Val	Pro	Ser	Ser	Ala	Ser	Thr
			115					120					125		
Ser	Val	Asn	Asn	Pro	Val	Ser	Gln	Thr	Pro	Ser	Ser	Gly	Gln	Val	Ile
			130					135					140		
Gln	Lys	Glu	Thr	Val	Gly	Gly	Thr	Thr	Tyr	Phe	Tyr	Thr	Asp	Thr	Thr
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Pro	Ala	Pro	Leu	Thr	Gly	Met	Val	Phe	Pro	Asn	Tyr	His	Ile	Tyr	Pro
															175
Pro	Thr	Ala	Pro	His	Val	Ala	Tyr	Met	Gln	Pro	Lys	Ala	Asn	Ala	Pro
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Ser	Phe	Phe	Met	Ala	Asp	Glu	Leu	Arg	Gln	Glu	Leu	Ile			
			195					200					205		

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<210> 3577
<211> 1225
<212> DNA
<213> Homo sapiens
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180
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240
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300
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420
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1020

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<210> 3578

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3578

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Ile	Ile	Leu	Asp	Ser	Leu	Leu	Phe	Phe	Tyr	Asp	Cys	Ser	Asn	Asn	Pro
		20						25					30		
Ile	Ser	Glu	His	Phe	His	Pro	Thr	Val	Ile	Gly	Glu	Ser	Met	Tyr	Gly
		35					40					45			
Asp	Phe	Glu	Glu	Ala	Phe	Asp	His	Leu	Gln	Asn	Arg	Leu	Ile	Ala	Thr
	50					55					60				
Lys	Asn	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Ser	Asn
65					70					75					80
Leu	Leu	Val	Arg	Asp	Phe	Arg	Pro	Thr	Asp	Gln	Glu	Glu	Ile	Lys	Thr
			85						90					95	
Leu	Glu	Arg	Tyr	Met	Cys	Ser	Arg	Phe	Phe	Ile	Asp	Phe	Pro	Asp	Ile
		100						105					110		
Leu	Glu	Gln	Gln	Arg	Lys	Leu	Glu	Thr	Tyr	Leu	Gln	Asn	His	Phe	Ala
		115					120					125			
Glu	Glu	Glu	Arg	Ser	Lys	Tyr	Asp	Tyr	Leu	Met	Ile	Leu	Arg	Arg	Val
	130					135					140				
Val	Asn	Glu	Ser	Thr	Val	Cys	Leu	Met	Gly	His	Glu	Arg	Arg	Gln	Thr
145					150					155					160
Leu	Asn	Leu	Ile	Ser	Leu	Leu	Ala	Leu	Arg	Val	Leu	Gly	Gly	Thr	Lys
			165					170						175	
His	His	Pro	Pro	Val	Pro	Pro	Arg	Ser	Pro	Val	Thr	Thr	Ser	Gly	Pro
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Leu	Ser	Gln													
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<210> 3579

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3579

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 180

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 420
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<211> 121

<212> PRT

<213> Homo sapiens

<400> 3580

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Ser	Leu	Trp	Ile	Leu	Pro	Ser	Phe	Phe	Gly	Val	Lys	Trp	Pro	Pro	Gln
	20							25					30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
	35						40					45			
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
	50					55					60				
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70					75				80		
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85					90					95		
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
		100					105						110		
Glu	Gln	Thr	Phe	Ser	Val	Thr	Ser	Arg							
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<210> 3581

<211> 2132

<212> DNA

<213> Homo sapiens

<400> 3581

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<210> 3582

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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Pro	Arg	Thr	Gly	Cys	Thr	Thr	Ala	Ser	Ala	Cys	Ser	Thr	Gly	Thr	Cys
			20					25					30		
Ala	Ala	Pro	Gly	Val	Ala	Pro	Arg	Gly	Ala	Cys	Trp	Thr	Cys	Thr	Arg
			35				40					45			
Arg	Ala	Ser	Ser	Ala	Cys	Thr	Arg	Arg	Gly	Thr	Ala	Ala	Ala	Trp	Ser
			50				55				60				
Ser	Arg	Pro	Arg	Pro	Ser	Thr	Thr	Ala	Thr	Ser	Arg	Cys	Ser	Ser	Ala
					70					75				80	
Arg	Trp	Arg	Arg	Arg	Thr	Arg	Gly	Cys	Thr	Pro	Ala	Thr	Cys	Thr	Ile
				85				90						95	
Thr	Thr	Ala	Thr	Ser	Thr	Arg	Ala	Trp	Pro	Ser	Ala	Trp	Arg	Ser	Pro
			100					105					110		
Thr	Ala	Pro	Arg	Pro	Pro	Pro	Pro	Thr	Gly	Thr	Ala	Arg	Arg	Arg	Cys
			115				120						125		
Trp	Arg	Trp	Arg	Ala	Ala	His	Pro	Arg	Phe						
			130				135								

<210> 3583

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3583

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<210> 3584

<211> 356

<212> PRT

<213> Homo sapiens

<400> 3584

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<211> 2782

<212> DNA

<213> Homo sapiens

<400> 3585

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<212> PRT

<213> Homo sapiens

<400> 3586

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<210> 3587

<211> 3148

<212> DNA

<213> Homo sapiens

<400> 3587

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<211> 499

<212> PRT

<213> Homo sapiens

<400> 3588

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Met	Ser	Thr																												

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<210> 3589
<211> 675
<212> DNA
<213> Homo sapiens
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120
aatagttctt gaccaggtc cctccatgaa cctcgaagct gaccagcca taggggggat
180
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 240
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 300
 gagtgaagaa ccaggcagaa cccaggcagc agatgggata ggagtttcca agccagtgtg
 360
 tggggatagg ccctcccaat tcagaaacaa agcaaggccc tggccacagc caggaaggat
 420
 tgtaagggcc ttcctgagca gacacaaagg agccctgagc tgctgggggt gatgaggagc
 480
 ggaggcaggg ccaggcagag ggtctgcaaa gaattacact ggaaagggtg aagggggaca
 540
 ttgggtctag tggtttggcc tgtggagagc tgtcaggaga ggggaggatg aggttgggtg
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<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

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Asn	Leu	Ile	Leu	Pro	Ser	Pro	Asp	Ser	Ser	Pro	Gln	Ala	Lys	Pro	Leu
			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
		35					40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
	50					55					60				
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70					75				80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
				85					90					95	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
			100					105					110		
Phe	Thr	His	Ile	Ser											
			115												

<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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 120
 cgatggtctt catcaggggt gattcctaata gaaaaaatac gaaatattgg aatctcagct
 180

cacattgatt ctgggaaaac tacattaaca gaacgagtcc ttactacac tggcagaatt
 240
 gcaaagatgc atgaggtgaa aggtaaagat ggagttggtg ctgtcatgga ttccatggaa
 300
 ctagagagac aaagaggaat cactattcag tcagcagcca cttacaccat gtggaaagat
 360
 gtcaatatta acattataga tactcctggg catgtggact tcacaataga agtggaaagg
 420
 gccctgagag tggtggatgg tgcagtcctt gttctctgtg ctgttggagg ggtacagtgc
 480
 cagaccatga ctgtcaatcg tcagatgaag cgctacaacg ttccgtttct aacttttatt
 540
 aacaaattgg accgaatggg ctccaaccca gccaggggccc tgcagcaaat gaggtctaaa
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 attgtagat
 669

<210> 3592

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3592

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Ala	Ala	Leu	Gly	Arg	Gly	Arg	Ala	Pro	Ala	Ser	Leu	Gly	Trp	Gln	Arg
		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
	50					55					60				
Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Tyr	Thr	Gly	Arg	Ile
65				70						75				80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
			85					90						95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
		100						105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
		115					120					125			
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130					135					140				
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145				150						155				160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
			165					170						175	
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		180					185						190		
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
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Gln	Ile	Pro	Met	Gly	Leu	Glu	Gly	Asn	Phe	Lys	Gly	Ile	Val	Asp	
	210					215						220			

<210> 3593
 <211> 1005
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
 gagatagaga gaagcctgta ttcagaccac gagcttcgtg ctctggatga aaaccagcga
 300
 ctggcaaaga agaaagctga ccttcattgat gaagaagatg aacaggatat attgctggcg
 360
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 420
 acagaagctg atgaaaagaa tgaccgaaca tccctgaaca ggaagctaga caggaacctt
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 600
 aacaacatgg aagccaagtt cctaggaaat gcacctgtg ggcactacac attcaagttc
 660
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 720
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 780
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 840
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<210> 3594
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 3594
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 20 25 30
 Arg Ser Leu Ala Leu Ala Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp
 35 40 45
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50		55		60											
Pro	Leu	Thr	Pro	Leu	Gln	Glu	Met	Ala	Ser	Leu	Leu	Gln	Gln	Ile	
65			70		75				80						
Glu	Ile	Glu	Arg	Ser	Leu	Tyr	Ser	Asp	His	Glu	Leu	Arg	Ala	Leu	Asp
			85		90				95						
Glu	Asn	Gln	Arg	Leu	Ala	Lys	Lys	Lys	Ala	Asp	Leu	His	Asp	Glu	Glu
			100		105				110						
Asp	Glu	Gln	Asp	Ile	Leu	Leu	Ala	Gln	Asp	Leu	Glu	Asp	Met	Trp	Glu
			115		120				125						
Gln	Lys	Phe	Leu	Gln	Phe	Lys	Leu	Gly	Ala	Arg	Ile	Thr	Glu	Ala	Asp
			130		135				140						
Glu	Lys	Asn	Asp	Arg	Thr	Ser	Leu	Asn	Arg	Lys	Leu	Asp	Arg	Asn	Leu
145			150		155				160						
Val	Leu	Leu	Val	Arg	Glu	Lys	Phe	Gly	Asp	Gln	Asp	Val	Trp	Ile	Leu
			165		170				175						
Pro	Gln	Ala	Glu	Trp	Gln	Pro	Gly	Glu	Thr	Leu	Arg	Gly	Thr	Ala	Glu
			180		185				190						
Arg	Thr	Leu	Ala	Thr	Leu	Ser	Glu	Asn	Asn	Met	Glu	Ala	Lys	Phe	Leu
			195		200				205						
Gly	Asn	Ala	Pro	Cys	Gly	His	Tyr	Thr	Phe	Lys	Phe	Pro	Gln	Ala	Met
			210		215				220						
Arg	Thr	Glu	Ser	Asn	Leu	Gly	Ala	Lys	Val	Phe	Phe	Phe	Lys	Ala	Leu
225			230		235				240						
Leu	Leu	Thr	Gly	Asp	Phe	Ser	Gln	Ala	Gly	Asn	Lys	Gly	His	His	Val
			245		250				255						
Trp	Val	Thr	Lys	Asp	Glu	Leu	Gly	Asp	Tyr	Leu	Lys	Pro	Lys	Tyr	Leu
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<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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180
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360
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420
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540

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1740
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1800
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1903

<210> 3596

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3596

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		20						25					30		
Gln	Met	Leu	Ala	Gln	Tyr	Ile	Glu	Ser	Phe	Thr	Gln	Gly	Ser	Ile	Glu
		35						40					45		
Ala	His	Lys	Arg	Gly	Ser	Arg	Phe	Trp	Ile	Gln	Asp	Lys	Gly	Pro	Ile
		50						55					60		
Val	Glu	Ser	Tyr	Ile	Gly	Phe	Ile	Glu	Ser	Tyr	Arg	Asp	Pro	Phe	Gly
65					70					75					80
Ser	Arg	Gly	Glu	Phe	Glu	Gly	Phe	Val	Ala	Val	Val	Asn	Lys	Ala	Met
					85					90					95
Ser	Ala	Lys	Phe	Glu	Arg	Leu	Val	Ala	Ser	Ala	Glu	Gln	Leu	Leu	Lys
					100					105					110
Glu	Leu	Pro	Trp	Pro	Pro	Thr	Phe	Glu	Lys	Asp	Lys	Phe	Leu	Thr	Pro
					115					120					125
Asp	Phe	Thr	Ser	Leu	Asp	Val	Leu	Thr	Phe	Ala	Gly	Ser	Gly	Ile	Pro
Ala	Gly	Ile	Asn	Ile	Pro	Asn	Tyr	Asp	Asp	Leu	Arg	Gln	Thr	Glu	Gly
145															
Phe	Lys	Asn	Val	Ser	Leu	Gly	Asn	Val	Leu	Ala	Val	Ala	Tyr	Ala	Thr
Gln	Arg	Glu	Lys	Leu	Thr	Phe	Leu	Glu	Glu	Asp	Asp	Lys	Asp	Leu	Tyr
Ile	Leu	Trp	Lys	Gly	Pro	Ser	Phe	Asp	Val	Gln	Val	Gly	Leu	His	Glu
Leu	Leu	Gly	His	Gly	Ser	Gly	Lys	Leu	Phe	Val	Gln	Asp	Glu	Lys	Gly
Ala	Phe	Asn	Phe	Asp	Gln	Glu	Thr	Val	Ile	Asn	Pro	Glu	Thr	Gly	Glu
225															
Gln	Ile	Gln	Ser	Trp	Tyr	Arg	Ser	Gly	Glu	Thr	Trp	Asp	Ser	Lys	Phe
Ser	Thr	Ile	Ala	Ser	Ser	Tyr	Glu	Glu	Cys	Arg	Ala	Glu	Ser	Val	Gly
Leu	Tyr	Leu	Cys	Leu	His	Pro	Gln	Val	Leu	Glu	Ile	Phe	Gly	Phe	Glu
Gly	Ala	Asp	Ala	Glu	Asp	Val	Ile	Tyr	Val	Asn	Trp	Leu	Asn	Met	Val
Arg	Ala	Gly	Leu	Leu	Ala	Leu	Glu	Phe	Tyr	Thr	Pro	Glu	Ala	Phe	Asn
305															
Trp	Arg	Gln	Ala	His	Met	Gln	Ala	Arg	Phe	Val	Ile	Leu	Arg	Val	Leu
Leu	Glu	Ala	Gly	Glu	Gly	Leu	Val	Thr	Ile	Thr	Pro	Thr	Thr	Gly	Ser
Asp	Gly	Arg	Pro	Asp	Ala	Arg	Val	Arg	Leu	Asp	Arg	Ser	Lys	Ile	Arg
Ser	Val	Gly	Lys	Pro	Ala	Leu	Glu	Arg	Phe	Leu	Arg	Arg	Leu	Gln	Val
Leu	Lys	Ser	Thr	Gly	Asp	Val	Ala	Gly	Gly	Arg	Ala	Leu	Tyr	Glu	Gly
385															
Tyr	Ala	Thr	Val	Thr	Asp	Ala	Pro	Pro	Glu	Cys	Phe	Leu	Thr	Leu	Arg
Asp	Thr	Val	Leu	Leu	Arg	Lys	Glu	Ser	Arg	Lys	Leu	Ile	Val	Gln	Pro
Asn	Thr	Arg	Leu	Glu	Gly	Asn	Gly	Ser	Asp	Val	Gln	Leu	Leu	Glu	Tyr

	435					440					445						
Glu	Ala	Ser	Ala	Ala	Gly	Leu	Ile	Arg	Ser	Phe	Ser	Glu	Arg	Phe	Pro		
	450					455					460						
Glu	Asp	Gly	Pro	Glu	Leu	Glu	Glu	Ile	Leu	Thr	Gln	Leu	Ala	Thr	Ala		
465						470					475					480	
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<210> 3597
<211> 1090
<212> DNA
<213> Homo sapiens
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120
gaaaatggtg ttctgctgtg tgatttgatt aataagctta aacctggcgt cattaagaag
180
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240
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300
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420
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480
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600
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660
gaaggttttg aaagtgcac agattcggaa ttacattca agatgcagga ttataataaa
720
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cgttttttac ccaacaaaag tagacagcca tcctatgtac cagcacctct gagaaagaaa
840
aagccagaca aacatgagga taacagaaga agttgggcaa gcccggttta tacagaagca
900
gatggaacat tttcaaggag taagtcctg agtgatgtca gcgcagaaga tgttcaaaac
960
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1090

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<210> 3598

<211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3598
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 20 25 30
 Asp Tyr Asn Lys Asp Asp Met Ser Tyr Arg Arg Ile Ser Ala Val Glu
 35 40 45
 Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
 50 55 60
 Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
 65 70 75 80
 His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
 85 90 95
 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
 100 105 110
 Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
 115 120 125
 Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
 130 135 140
 Lys Trp Lys Asp Arg Arg Lys Ser Tyr Thr Ser Asp Leu Gln Lys
 145 150 155

<210> 3599
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 3599
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 120
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 180
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 420
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 480
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 540
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 600
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691

<210> 3600

<211> 98

<212> PRT

<213> Homo sapiens

<400> 3600

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Asn	Lys	Leu	Gly	Pro	Cys	Met	Leu	Leu	Ala	Leu	Arg	Gly	Asn	Gln	Thr
		20						25					30		
Met	Val	Glu	Val	Arg	Ser	Trp	Ser	Gly	Ser	Leu	Val	Gly	Trp	Leu	Ala
	35						40					45			
Pro	Arg	Pro	Leu	Ser	Val	Pro	Ile	Glu	His	Leu	Leu	Gly	Ala	Lys	Asn
	50					55					60				
Cys	Cys	Arg	His	Gly	Gly	Gln	Trp	Val	Arg	Arg	Ala	Val	Pro	Ala	Val
65				70					75					80	
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Leu	Leu														

<210> 3601

<211> 2963

<212> DNA

<213> Homo sapiens

<400> 3601

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<210> 3602

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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			20					25					30		
Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His
			35					40					45		
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
			50					55				60			
Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
65					70					75				80	
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
				85					90					95	
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100					105					110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115					120					125		
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
			130					135					140		
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
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Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
				165					170					175	
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
			180					185					190		
Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

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Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Gly Lys Leu		
210	215	220
Thr Val Phe Thr Val Leu Cys Glu Gln Tyr Gln Pro Ser Leu Arg Arg		
225	230	235
Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg Ile Gly Gln Leu Phe Phe		240
	245	250
Gly Val Pro Pro Lys Gln Thr Ser Ser Tyr Gly Gly Leu Leu Gly Asn		255
	260	265
Leu Leu Thr Ser Leu Met Gly Ser Ser Glu Gln Glu Asp Gly Glu Glu		270
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<210> 3603

<211> 1082

<212> DNA

<213> Homo sapiens

<400> 3603

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<210> 3604
 <211> 146
 <212> PRT
 <213> Homo sapiens

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 Val Ala Ala Gln Glu Glu Pro Asp Lys Glu Gly Lys Glu Lys Pro His
 35 40 45
 Ala Gly Val Ser Pro Arg Gly Val Lys Arg Gln Arg Arg Ser Ser Ser
 50 55 60
 Gly Gly Ser Gln Glu Lys Arg Gly Arg Pro Ser Gln Glu Pro Pro Leu
 65 70 75 80
 Ala Pro Pro His Arg Arg Arg Arg Ser Arg Gln His Pro Gly Pro Leu
 85 90 95
 Pro Pro Thr Asn Ala Ala Pro Thr Val Pro Gly Pro Val Glu Pro Leu
 100 105 110
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 <211> 2004
 <212> DNA
 <213> Homo sapiens

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<210> 3606

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3606

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Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
      35           40           45
Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
      50           55           60
Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala
65           70           75           80
Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
      85           90           95
Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
      100          105          110
Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
      115          120          125
Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
      130          135          140
Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
145          150          155          160
Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
      165          170          175
Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
      180          185          190
Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
      195          200          205
Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
      210          215          220
Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
225          230          235          240
Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
      245          250          255
Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
      260          265          270
Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
      275          280          285
Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
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<210> 3607

<211> 1726

<212> DNA

<213> Homo sapiens

<400> 3607

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<210> 3608

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3608

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		20						25				30			
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75					80
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
				85					90					95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100					105					110		
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
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Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
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Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
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Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210					215					220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225				230						235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245						250					255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
		260					265						270		
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
	275						280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
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305				310						315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
			325						330					335	
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

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Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser					
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Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val					
	370		375		380
Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn					
385		390		395	400
Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser					
	405		410		415
Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu					
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Gly Val Ser Asp					
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<210> 3609

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 3609

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1020

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<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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		20						25					30		
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
		35					40					45			
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp
	50					55					60				
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
65					70					75					80
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
			85						90					95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
			100					105					110		
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
		115					120					125			
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
		130				135					140				
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser
145					150					155					160
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
			165						170					175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
		180						185					190		
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
		195					200					205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
		210				215						220			
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225					230					235					240
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
			245						250					255	
Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg				
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<210> 3611

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3611

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 gacccacgca gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac
 240
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 300
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 360
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 420
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 660
 cccattgttc ggagaagaat aggaacagcc ttcaaactgg atgaacagaa aatcctgccc
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 816

<210> 3612

<211> 272

<212> PRT

<213> Homo sapiens

<400> 3612

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 20 25 30
 Lys Val Lys Pro Arg Lys Ile Phe Gln Trp Arg Gln Leu Glu Asn Leu
 35 40 45
 Tyr Phe Arg Glu Lys Lys Phe Ser Val Glu Val His Asp Pro Arg Arg
 50 55 60
 Ala Ser Val Thr Arg Arg Thr Phe Gly His Ser Gly Ile Ala Val His
 65 70 75 80
 Thr Trp Tyr Ala Cys Pro Ala Leu Ile Lys Ser Ile Trp Ala Met Ala
 85 90 95
 Ile Ser Gln His Gln Phe Tyr Leu Asp Arg Lys Gln Ser Lys Ser Lys
 100 105 110
 Ile His Ala Ala Arg Ser Leu Ser Glu Ile Ala Ile Asp Leu Thr Glu

<400> 3614

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Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
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His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
      20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
      35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
      50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
      85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
      100          105          110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
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<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 3615

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120
cagtccccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
180
gcagagggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
240
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300
cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcggagcta
360
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420
gctgagagag ccctgaata cacggagccc cttggggggc tgcagcggag cctcaagatt
480
cgcatccagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
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600
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660
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720
gactccctgc cgcccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
780
tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
840
gctgtgtccc ctcagaagag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
900

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tgcccagcca ggctcctgtg gtgctgctgg gccctccac tccatctggc actggcctgg
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 1020
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 1380
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 1388

<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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Gly	Asp	Ser	Ala	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Glu	Ser	Glu	Glu
			20					25					30		
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu	Met
		35					40					45			
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu	Met
	50					55					60				
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe	Arg
65					70					75				80	
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala	Glu
				85					90					95	
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser	Leu
			100					105					110		
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu	Asp
		115					120					125			
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln	His
	130					135					140				
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu	Leu
145				150						155				160	
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp	Leu
			165						170					175	
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser	Arg
		180					185						190		
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu	Val
	195						200					205			
Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu	Glu
	210					215					220				
Asp	Trp	Thr	Ala	Ile	Lys	Lys	Ala	Arg	Ala	Ala	Val	Ser	Pro	Gln	Lys

225									230									235									240
Arg	Lys	Ser	Asp	Asp	Arg	Arg	Thr	His	Arg	Pro	Leu	Arg	Val	Cys	Pro												
				245					250					255													
Ala	Arg	Leu	Leu	Trp	Cys	Cys	Trp	Ala	Leu	Pro	Leu	His	Leu	Ala	Leu												
				260					265					270													
Ala	Trp	Thr	Pro	Pro	Leu	Pro	Ser	Ser	Arg	Pro	Ala	Gln	Leu	Trp	Pro												
				275					280					285													
Trp	Ser																										
290																											

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<210> 3617
<211> 804
<212> DNA
<213> Homo sapiens
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<400> 3617
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120
aggatgggat ggtagtagtg aaggacatag gatgggggta gagtgtggag actttttgaa
180
atagtataga tgaatgccct gaggggactg tgaacaagct ctgccccctct taggaaatca
240
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300
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360
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420
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480
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<210> 3618
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<212> PRT
<213> Homo sapiens
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<400> 3618
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20 25 30
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 35 40 45
 Ser Tyr Cys Pro Asp Cys Ala Leu Leu Leu Val Ser Ala Asn Thr Gly
 50 55 60
 Ile Ala Gly Thr Thr Arg Glu His Leu Gly Leu Ala Leu Ala Leu Lys
 65 70 75 80
 Val Pro Phe Phe Ile Val Val Ser Lys Ile Asp Leu Cys Ala Lys Thr
 85 90 95
 Thr Val Glu Arg Thr Val Arg Gln Leu Glu Arg Val Leu Lys Gln Pro
 100 105 110
 Gly Cys His Lys Val Pro Met Leu Val Thr Ser Glu Asp Asp Ala Val
 115 120 125
 Thr Ala Ala Gln Gln Phe Ala Gln Ser Pro Asn Val Thr Pro Ile Phe
 130 135 140
 Thr Leu Ser Ser
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<210> 3619

<211> 948

<212> DNA

<213> Homo sapiens

<400> 3619

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<210> 3620
<211> 159
<212> PRT
<213> Homo sapiens

<400> 3620
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Ser Ser Ser Ser Met Ala Thr Pro Leu Ser Cys Cys Pro Thr Trp Ala
35 40 45
Pro Gly Ala Ser Ser Gln Pro Cys Ser Thr Tyr Pro Pro Trp Arg Thr
50 55 60
Thr Thr Leu Ser Thr Ser Thr Ser Trp Ser Cys Leu Leu Leu Pro Cys
65 70 75 80
Ala Ser Cys Pro Ser Arg Cys Ser Cys Gln Thr Trp Pro Ser Ser Pro
85 90 95
Thr Ala Ser Thr Pro Thr Thr Ser Cys Thr Ser Phe Met Thr Thr Cys
100 105 110
Cys His Ser Ser Thr Pro Cys Gly Ser Phe Pro Ala Trp Pro Thr Arg
115 120 125
His Gly Ser Ser Ser Trp Arg Ala Gly Ala Arg Val His Thr Ser Thr
130 135 140
Ser Thr Ser Cys Ser Ala Pro Ser Ser Leu Ser Cys Gly His Ser
145 150 155

<210> 3621
<211> 2934
<212> DNA
<213> Homo sapiens

<400> 3621
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180
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240
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300
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540

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<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
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Ile	Ala	Tyr	Tyr	Val	Ser	Gly	Val	Leu	Pro	Phe	Val	Glu	Asn	Gln	Pro				
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<210> 3623

<211> 586

<212> DNA

<213> Homo sapiens

<400> 3623

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<211> 159

<212> PRT

<213> Homo sapiens

<400> 3624

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			20					25				30							
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Glu	Lys	Lys	Arg	Met	Asp	Lys	Ala	Ile	Gly	Tyr	Ser	Phe	Ala	Ile	Val				
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			100					105					110						
Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg				
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<210> 3625

<211> 4799

<212> DNA

<213> Homo sapiens

<400> 3625

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
		35				40						45			
Asn	Val	Val	Ala	Phe	Ser	Glu	Ile	Met	Ser	Met	Ile	Trp	Lys	Arg	Leu
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Asn	Asp	His	Gly	Lys	Asn	Trp	Arg	His	Val	Tyr	Lys	Ala	Met	Thr	Leu
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Met	Glu	Tyr	Leu	Ile	Lys	Thr	Gly	Ser	Glu	Arg	Val	Ser	Gln	Gln	Cys
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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 Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly Val Pro Val Ser
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<211> 1760

<212> DNA

<213> Homo sapiens

<400> 3627

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 3628

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			20					25					30		
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Glu	Gln	Asp	Phe	Gly	Ile	Glu	Ile	Val	Lys	Val	Lys	Ala	Ile	Gly	Arg
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Gln	Arg	Phe	Lys	Val	Leu	Glu	Leu	Arg	Thr	Gln	Ser	Asp	Gly	Ile	Gln
			165					170					175		
Gln	Ala	Lys	Val	Gln	Ile	Leu	Pro	Glu	Cys	Val	Leu	Pro	Ser	Thr	Met
			180					185					190		
Ser	Ala	Val	Gln	Leu	Glu	Ser	Leu	Asn	Lys	Cys	Gln	Ile	Phe	Pro	Ser
	195						200					205			
Lys	Pro	Val	Ser	Arg	Glu	Asp	Gln	Cys	Ser	Tyr	Lys	Trp	Trp	Gln	Lys
	210					215					220				
Tyr	Gln	Lys	Arg	Lys	Phe	His	Cys	Ala	Asn	Leu	Thr	Ser	Trp	Pro	Arg
225				230						235					240
Trp	Leu	Tyr	Ser	Leu	Tyr	Asp	Ala	Glu	Thr	Leu	Met	Asp	Arg	Ile	Lys
			245						250					255	
Lys	Gln	Leu	Arg	Glu	Trp	Asp	Glu	Asn	Leu	Lys	Asp	Asp	Ser	Leu	Pro
			260					265					270		
Ser	Asn	Pro	Ile	Asp	Phe	Ser	Tyr	Arg	Val	Ala	Ala	Cys	Leu	Pro	Ile
	275						280					285			
Asp	Asp	Val	Leu	Arg	Ile	Gln	Leu	Leu	Lys	Ile	Gly	Ser	Ala	Ile	Gln
	290					295					300				
Arg	Leu	Arg	Cys	Glu	Leu	Asp	Ile	Met	Asn	Lys	Cys	Thr	Ser	Leu	Cys
305					310					315					320
Cys	Lys	Gln	Cys	Gln	Glu	Thr	Glu	Ile	Thr	Thr	Lys	Asn	Glu	Ile	Phe
			325						330					335	
Ser	Leu	Ser	Leu	Cys	Gly	Pro	Met	Ala	Ala	Tyr	Val	Asn	Pro	His	Gly
			340					345					350		
Tyr	Val	His	Glu	Thr	Leu	Thr	Val	Tyr	Lys	Ala	Cys	Asn	Leu	Asn	Leu
		355					360					365			
Ile	Gly	Arg	Pro	Ser	Thr	Glu	His	Ser	Trp	Phe	Pro	Gly	Tyr	Ala	Trp
	370					375					380				
Thr	Val	Ala	Gln	Cys	Lys	Ile	Cys	Ala	Ser	His	Ile	Gly	Trp	Lys	Phe
385					390					395					400
Thr	Ala	Thr	Lys	Lys	Asp	Met	Ser	Pro	Gln	Lys	Phe	Trp	Gly	Leu	Thr

	405		410		415
Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser					
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Pro Asp Lys Val Ile Leu Cys Leu					
	435		440		

<210> 3629

<211> 695

<212> DNA

<213> Homo sapiens

<400> 3629

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120
acggcgatatg ccatgctgcc cttgggcatg cgggacgccg ccgtcgcggg cctcgcctcc
180
tcaactctgc atctgctggt cctcgggctg tatcttgggc cacagccgga ctacaggcct
240
gcactgctgc cgcagttggc agcaaacgca gtgctgttcc tgtgcgggaa cgtggcagga
300
gtgtaccaca aggcgtgat ggagcgcgcc ctgcgggcca cgttccggga ggcactcagc
360
tccctgcact cacgccggcg gctggacacc gagaagaagc accaggtcag ccgggcctag
420
gaaggtcaga gcagcgctcc gagggaggag ttgcttagat tacataacgg ggctcctcca
480
caagttgagt gactctgggc aggtttcttg acctgtttct tcttttgtat aaaatgtggg
540
tattgcccac cttagaaggt tgtgaggctc aaacaaacca aagcttataa aaagcacttt
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agagcattat gatattaagt gaactcccat tcagggtgtg atactgggag tttagtcact
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aaagtgatc agtgtaggat ggagtgtgg ggccc
695

<210> 3630

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3630

Thr Arg Pro Leu Ser Gly Leu Val Trp Val Ala Leu Leu Ala Leu Gly															
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His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val															
	20					25			30						
Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu															
	35				40				45						
Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His															
	50			55				60							
Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro															
65		70				75			80						
Ala Leu Leu Pro Gln Leu Ala Ala Asn Ala Val Leu Phe Leu Cys Gly															

				85				90					95		
Asn	Val	Ala	Gly	Val	Tyr	His	Lys	Ala	Leu	Met	Glu	Arg	Ala	Leu	Arg
			100					105					110		
Ala	Thr	Phe	Arg	Glu	Ala	Leu	Ser	Ser	Leu	His	Ser	Arg	Arg	Arg	Leu
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Asp	Thr	Glu	Lys	Lys	His	Gln	Val	Ser	Arg	Ala					
	130					135									

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<210> 3631
<211> 864
<212> DNA
<213> Homo sapiens
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120
gctgcaaagg aatcagtcct ggctggatca tgtctgcatt tcccagatgt gctatttccc
180
ggggattggg cctggtacat gcagtatctg gagaagcgca agaatcctgt gtgccacttt
240
gtgacacccc tggacggctc tgtggacgta gacgagcacc gccggccgga ggccatcacc
300
acggaaggga agtactggaa gagccgcctc gagattgtga tccgggagta tcacaagtgg
360
agaacctact tcaagaaaag gctacagcag cacaaggatg aggacctctc cagcctggctc
420
caggacgatg acatgctgta ttggcacaag cacgggggatg gatggaagac ccccgctccc
480
atggaggagg atccccctgt ggacacagac atgctcatgt cggaattcag cgacaccctc
540
ttctccacac tttcttcaca ccagccggtg gcctggccca atccccggga aatagcacat
600
ctgggaaatg cagacatgat ccagccggga ctgattcctt tgcagcctaa cctggacttc
660
atggacacct ttgagccttt ccaggacctc ttctcttcta gccgctccat ttttggctcc
720
atgtacctg catctgcctc agcacctgta ccagatccca acaaccaccc tgcacaggag
780
agcatcctgc cgaccacagc cctccccact gtgagccttc ctgacagcct catcgcgccc
840
cccaccgccc catccctggc gcgc
864

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<210> 3632
<211> 222
<212> PRT
<213> Homo sapiens
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<400> 3632
Met Gln Tyr Leu Glu Lys Arg Lys Asn Pro Val Cys His Phe Val Thr
  1             5             10            15
Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

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			20					25					30		
Ile	Thr	Thr	Glu	Gly	Lys	Tyr	Trp	Lys	Ser	Arg	Ile	Glu	Ile	Val	Ile
		35					40					45			
Arg	Glu	Tyr	His	Lys	Trp	Arg	Thr	Tyr	Phe	Lys	Lys	Arg	Leu	Gln	Gln
	50					55					60				
His	Lys	Asp	Glu	Asp	Leu	Ser	Ser	Leu	Val	Gln	Asp	Asp	Asp	Met	Leu
65					70					75					80
Tyr	Trp	His	Lys	His	Gly	Asp	Gly	Trp	Lys	Thr	Pro	Val	Pro	Met	Glu
			85						90					95	
Glu	Asp	Pro	Leu	Leu	Asp	Thr	Asp	Met	Leu	Met	Ser	Glu	Phe	Ser	Asp
			100					105					110		
Thr	Leu	Phe	Ser	Thr	Leu	Ser	Ser	His	Gln	Pro	Val	Ala	Trp	Pro	Asn
		115					120					125			
Pro	Arg	Glu	Ile	Ala	His	Leu	Gly	Asn	Ala	Asp	Met	Ile	Gln	Pro	Gly
	130					135					140				
Leu	Ile	Pro	Leu	Gln	Pro	Asn	Leu	Asp	Phe	Met	Asp	Thr	Phe	Glu	Pro
145					150					155					160
Phe	Gln	Asp	Leu	Phe	Ser	Ser	Ser	Arg	Ser	Ile	Phe	Gly	Ser	Met	Leu
			165						170					175	
Pro	Ala	Ser	Ala	Ser	Ala	Pro	Val	Pro	Asp	Pro	Asn	Asn	Pro	Pro	Ala
			180					185					190		
Gln	Glu	Ser	Ile	Leu	Pro	Thr	Thr	Ala	Leu	Pro	Thr	Val	Ser	Leu	Pro
		195					200					205			
Asp	Ser	Leu	Ile	Ala	Pro	Pro	Thr	Ala	Pro	Ser	Leu	Ala	Arg		
	210					215					220				

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<210> 3633
<211> 1570
<212> DNA
<213> Homo sapiens
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gcagaagggc tgaagtgaca ggatgttcat tgacctgtca gtggatctga aagttctcta
120
aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcacc
180
ctgtgtgaag atggcatttc tcactgatta ttggaaaagc acaagagcca cgtgctggag
240
ccattgtcca gccttgccct ggaggagcag tgtctggctt tgtccctaga ttgggtccact
300
gggaaaactg gaagggccgg ggaccagccc ttgaagatca tcagcagtga ctccacaggg
360
cagctccacc tcctgatggg gaatgagacg agggcccaggc tgcagaaagt ggcctcatgg
420
caggcacatc aattcgaggc ctggattgct gctttcaatt actggcatcc agaaattgtg
480
tattcagggg gcgacgatgg ccttctgagg ggctgggaca ccaggggtacc cggcaaattt
540
ctcttcacca gcnaaaagac acaccatnng ggtgtgtgca gcatccagag cagccctcat
600
cgggagcaca tcctggccac gggaagctat gatgaacaca tcctactgtg ggacacacga
660

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aacatgaagc agccgttggc agatacgct gtgcagggtg gggatatggag aatcaagtgg
 720
 caccctttcc accaccacct gctcctggcc gcctgcatgc acagtggctt taagatcctc
 780
 aactgccaaa aggcaatgga ggagaggcag gaggcgacgg tcctgacatc tcacacattg
 840
 cccgactcgc tgggtgtatgg agccgactgg tcctggctgc tcttccgttc tctgcagcgg
 900
 gccccctcgt ggtcctttcc tagcaacctt ggaaccaaga cggcagacct gaaggggtgca
 960
 agcgagtgtg caacaccctg tcatgaatgc agagaggata acgatgggga gggccatgcc
 1020
 agaccccaga gtggaatgaa gccactcaca gagggcatga ggaagaatgg cacctggctg
 1080
 caggctacag cagccaccac acgtgactgt ggcgtgaacc cagaagaagc agactcagcc
 1140
 ttcagcctcc tggccacctg ctccttctat gaccatgcgc tccacctctg ggagtgggag
 1200
 gggaactgag cttgaaatca tgaagcccct tcccacaagg aaaccaggag ggagactgcg
 1260
 agtgagtgcc cgggaccacc tcatcagaga tgcttactgc agccctgcag gtgcctgtgc
 1320
 actgatggaa tccacagtgt agtcagaaaa gctgttgact tctcttaaact cagcttcctt
 1380
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 1440
 gtttcacagt tgcagatttg ttaagtttct caggcagatt ttgactttca gcctttcata
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 1570

<210> 3634

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3634

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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
		20						25					30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
		35					40					45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
		50				55					60				
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65					70					75				80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85					90					95		
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100					105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met


```

      115      120      125
His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg
      130      135      140
Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val
145      150      155      160
Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala
      165      170      175
Pro Ser Trp Ser Phe Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu
      180      185      190
Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp
      195      200      205
Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu
      210      215      220
Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala
225      230      235      240
Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe
      245      250      255
Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp
      260      265      270
Glu Trp Glu Gly Asn
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<210> 3635

<211> 835

<212> DNA

<213> Homo sapiens

<400> 3635

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120
gttttactta aagatgaacc ccagcagact gctgctcaga tgggttggtgc gccaatccag
180
cctctggcga tgcctcaagc tttgcctctg gcggcaggtc ccttgccctcc aggggtccatc
240
gcaaactctta cagaactgca aggagtgata gttggacagc cagtactggg ccaagcacag
300
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360
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420
tctgcaatgt caaacactcc taccacagc attgctgcat ccatttccca acctcagact
480
ccaactccaa gtccatcat ctctccttca gccatgcttc ctatctaccc tgccattgat
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600
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660
aaagggtttta ctccactcat cttggctgcc acagctggtc atgttggtgt tgtggaaata
720
ttgctggaca atggtgcaga cattgaagcc cagtctgaaa gaaccaagga cacaccactc
780

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835

<210> 3636
<211> 278
<212> PRT
<213> Homo sapiens

<400> 3636
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Leu Leu Thr Pro Val Gly Val Gly Glu Gln Leu Ser Glu Gly Asp Tyr
20 25 30
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln
35 40 45
Gln Thr Ala Ala Gly Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met
50 55 60
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile
65 70 75 80
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu
85 90 95
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr
100 105 110
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr
115 120 125
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser
130 135 140
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr
145 150 155 160
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr
165 170 175
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala
180 185 190
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu
195 200 205
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr
210 215 220
Pro Leu Ile Leu Ala Thr Ala Gly His Val Gly Val Val Glu Ile
225 230 235 240
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys
245 250 255
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val
260 265 270
Glu Leu Leu Leu Ala Arg
275

<210> 3637
<211> 2128
<212> DNA
<213> Homo sapiens

<400> 3637
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120
cctgccaacc cctgctcttc caggctcggc cccgggggttc tgcggtctgtt agggacagag
180
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240
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300
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420
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1140
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1260
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1380
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1440
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1500
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1560
acatacagac atatgcatcc ccacacacgc ctatgcacaa acgtggatta tcgcacagac
1620
tgggagggtt agtgggtgat ttctcctctg ttttcttttt aatatacatt taaaatacag
1680

tattatcact ttataaaaca tacattaagc ctaataaatg gaccaataag ccaaactatc
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 1860
 tctgagtagc ttctgctatg atattcttat gaagaaaagg ggcaactttc tgtccactat
 1920
 aggagagaat tcagccgaag atatgagagt aatgagagac attttccagt cattggatcg
 1980
 tgttttcttt tgtccattat tgtactgtgc tgtaccacat ttatttctat attcattttg
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<210> 3638

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3638

Met	Ala	Ser	Ser	Leu	Thr	Cys	Thr	Gly	Val	Ile	Trp	Ala	Leu	Leu	Ser
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Phe	Leu	Cys	Ala	Ala	Thr	Ser	Cys	Val	Gly	Phe	Phe	Met	Pro	Tyr	Trp
			20					25				30			
Leu	Trp	Gly	Ser	Gln	Leu	Gly	Lys	Pro	Val	Ser	Phe	Gly	Thr	Phe	Arg
		35					40				45				
Arg	Cys	Ser	Tyr	Pro	Val	His	Asp	Glu	Ser	Arg	Gln	Met	Met	Val	Met
	50					55				60					
Val	Glu	Glu	Cys	Gly	Arg	Tyr	Ala	Ser	Phe	Gln	Gly	Ile	Pro	Ser	Ala
65					70				75					80	
Glu	Trp	Arg	Ile	Cys	Thr	Ile	Val	Thr	Gly	Leu	Gly	Cys	Gly	Leu	Leu
			85					90					95		
Leu	Leu	Val	Ala	Leu	Thr	Ala	Leu	Met	Gly	Cys	Cys	Val	Ser	Asp	Leu
			100					105				110			
Ile	Ser	Arg	Thr	Val	Gly	Arg	Val	Ala	Gly	Gly	Ile	Gln	Phe	Leu	Gly
		115				120					125				
Gly	Leu	Leu	Ile	Gly	Ala	Gly	Cys	Ala	Leu	Tyr	Pro	Leu	Gly	Trp	Asp
	130					135					140				
Ser	Glu	Glu	Val	Arg	Gln	Thr	Cys	Gly	Tyr	Thr	Ser	Gly	Gln	Phe	Asp
145					150				155					160	
Leu	Gly	Lys	Cys	Glu	Ile	Gly	Trp	Ala	Tyr	Tyr	Cys	Thr	Gly	Ala	Gly
			165					170					175		
Ala	Thr	Ala	Ala	Met	Leu	Leu	Cys	Thr	Trp	Leu	Ala	Cys	Phe	Ser	Gly
			180					185					190		
Lys	Lys	Gln	Lys	His	Tyr	Pro	Tyr								
		195					200								

<210> 3639

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3639

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 aagaataagc tttaatatat atacacccat aataccttca aatacatttt taagcactta
 120
 aagactaaca gtgggttatct ctcagcggga ttataaatgt tttgggtttt tttttttttt
 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
 tgtgccttct cctgtctctt tctaggtcct gattctcacc tctgcctgtg taataaccct
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 taagat
 726

<210> 3640

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40						45		
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
			50			55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70					75				80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
				100											

<210> 3641

<211> 455

<212> DNA

<213> Homo sapiens

<400> 3641
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 120
 agtccccgag cagtcacgcg agccgggacc ttgccccgct ggaacgcaga agcggccgtg
 180
 gagctcgaga cgctcgcgcg ctcacctcct gggccccctgt gcgtggggaa gtcaggaaga
 240
 agacgccgag tgaggtcacg gtgcccacga ggggtggattc ccctcggcct gaccacgcca
 300
 ggaggtggcc gaaggggaaga ggggtggggca ggggctgctc tgcacctctc agcagagcgg
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 420
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 455

<210> 3642
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3642
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 Pro Arg Gly Arg Ala Gly Gly Ala Ala Pro Gly Gly Glu Glu Met Ser
 20 25 30
 Gln Ser Pro Glu Glu Ser Arg Ser Ser His Ala Ser Arg Asp Leu Ala
 35 40 45
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
 50 55 60
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
 65 70 75 80
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
 85 90 95
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
 100 105 110
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
 115 120 125
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
 130 135 140
 Phe Lys Thr Arg
 145

<210> 3643
 <211> 2243
 <212> DNA
 <213> Homo sapiens

<400> 3643
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ttcaagatct tcccactgct gggtttgcac gaggagggat taagaaagtt ctccgagtac
120
ctttgcaagc aggtggccag taaagctgag gagaatctgc tcatggtgct ggggacagac
180
atgagtgatc ggagagctgc agtcactctt gcagatacac ttactcttct gtttgaaggg
240
attgcccgc tttgtggagac ccaccagcca atagtggaga cctattatgg gccagggaga
300
ctctataccc tgatcaaata tctgcagggtg gaatgtgaca gacaggtgga gaaggtggta
360
gacaagttca tcaagcaaag ggactaccac cagcagttcc ggcatgttca gaacaacctg
420
atgagaaatt ctacaacaga aaaaatcgaa ccaagagAAC tggaccccat cctgactgag
480
gtcaccctga tgaatgcccg cagtgaagta tacttacgct tcctcaagaa gaggattagc
540
tctgattttg aggtgggaga ctccatggcc tcagaggaag taaagcaaga gcaccagaag
600
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660
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720
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780
aagaagtga tttggcgggc tctgtccagc tccagcattg actgtctctg tgccatgatc
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960
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1080
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1140
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1260
caggtgcagc cttggatcaa cagcttttcc tccgtctccc acaacatcga ggaggaagaa
1320
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1380
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1440
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1560
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1620
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1680

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 1740
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 1860
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 1920
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 1980
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 2040
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 2100
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 2160
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 2220
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 2243

<210> 3644

<211> 560

<212> PRT

<213> Homo sapiens

<400> 3644

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Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly	Thr
			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35				40					45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50				55					60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
65				70				75					80		
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85					90					95		
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
		100					105						110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
	115				120							125			
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
	130				135						140				
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145				150					155					160	
Ser	Met	Ala	Ser	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp	
			165					170					175		
Lys	Leu	Leu	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile	
		180					185					190			
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
	195					200						205			
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser


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      210              215              220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala
225              230              235              240
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala
      245              250              255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu
      260              265              270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val
      275              280              285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe
      290              295              300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu
305              310              315              320
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu
      325              330              335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile
      340              345              350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu
      355              360              365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr
      370              375              380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn
385              390              395              400
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Glu Phe Asn Asp
      405              410              415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu
      420              425              430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp
      435              440              445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys
      450              455              460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp
465              470              475              480
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp
      485              490              495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu
      500              505              510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser
      515              520              525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu
      530              535              540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu
545              550              555              560

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<210> 3645

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3645

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ccagggtttt gtagatggat tcctcaaaaa ctcttttgag gtattgcctg ggcttctcag
120

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tcgggttgat ttcctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt
 180
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt
 240
 ggaacagggc caggcaccac ggctcgggtga agtagctata gagatctgtg atcagggtttt
 300
 catcgtaccg agcacacagg ttgttgagga gttgctcgtg ctggccaaac aagcggatgt
 360
 agttggaggc ggggaagggc tccctagaaa ggcacgtgat ggtttccacc attttatact
 420
 tgттаататg aattcggaag taagtcccat ttttcgcact gccggttact agttctaaac
 480
 cataattagg ctgggccatt tgtacctcca agggagttgg aatggcaggc ttggcaatat
 540
 gcagataatg gtaagaccca ggaagaatgc ccccttgaat cttggctccc ttgtacatgg
 600
 ggatgagccg gtcaagatta gctgggtggct cggtcacagg ctcaagggtt ggatcaaaga
 660
 gatgtagcat agctgctgcc agctgaaagc caatttcttt ggaactgaag ttgctggtgg
 720
 gccattcat ttgagtagta tctattggag aatttggtga gggagccagc agctctgatg
 780
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 823

<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
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Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
			20					25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
	35					40					45				
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70					75					80
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85						90					95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105					110		
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120					125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155					160
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170						175	
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

						180						185						190					
Ala	His	Gln	Ile	Glu	Asp	Glu	Glu	Ile	Asn	Pro	Thr	Glu	Lys	Pro	Arg								
						195						200						205					
Gln	Tyr	Leu	Lys	Arg	Val	Phe	Glu	Glu	Ser	Ile	Tyr	Lys	Thr	Leu	Val								
						210						215						220					
Glu	Arg	Ser	Thr	Leu	Asp	Tyr	Leu	His	Tyr	Asn	Arg	Tyr	His	Leu	Pro								
						225						230						235					
Met	Tyr	Ala																					

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<210> 3647
<211> 584
<212> DNA
<213> Homo sapiens
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<400> 3647
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120
acgagggcac ctactcctgc cacctgcacc accattactg tggcctgcac gaacgcgcgcg
180
tcttccacct gacggtcgcc gaacccacg cggagccgcc cccccggggc tctccgggca
240
acggctccag ccacagcggc gccccaggcc caggtgaagg aggcctccct gggaccgggg
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aaggcgggag cccacccac cggggggttg tctgcgcccg ctgtcccttg cccgaggccc
360
gcggatccca gcgggnnggc cgtggcccgg gtcggggcgc aggtcttgct ggtacctgac
420
gccgctccga ccccgcggtc cccgcagacc ccacactggc gcgcggccac aacgtcatca
480
atgtcatcgt ccccgagagc cgagcccact tcttcagca gctgggctac gtgctggcca
540
cgctgctgct cttcatcctg ctactggtea ctgtcctcct ggcc
584

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<210> 3648
<211> 63
<212> PRT
<213> Homo sapiens
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<400> 3648
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Ala Trp Leu Trp Ala Arg Met Pro Leu Ser Ala Val Thr Ser His Cys
          20           25           30
Val Ser Ser Arg Trp Arg Ser Pro Thr Arg Ala Pro Thr Pro Ala Thr
        35           40           45
Cys Thr Thr Ile Thr Val Ala Cys Thr Asn Ala Ala Ser Ser Thr
      50           55           60

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<210> 3649
<211> 648

<212> DNA

<213> Homo sapiens

<400> 3649

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120
tgctcattgt ttgtctgtgt cccctttttt tttcaggttg ctatttctgc agatgtcaaa
180
gaagttctgt taactgatgg gaatgaaaag gccatcagaa atgtgcaaga catcatcaca
240
aggaatcaga aggctggtgt gtttaagacc cagaaaatat caagctgcgt tttacgatgg
300
gataatgaga cagatgtctc tcaactggaa ggacattttg acattgttat gtgtgctgac
360
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420
cccaggggga aagcgatggt atttgcccca cgccgaggga atactttaaa ccagttttgc
480
aatctagctg aaaaagctgg tttctgtatc caaagacatg aaaattatga tgaacacatt
540
tcaaacttcc actccaagtt gaaaaaggaa aaccgggaca tatatgaaga aaaccttcat
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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

Met	Ile	Leu	Lys	Ala	Cys	His	Ser	Cys	Phe	His	Phe	His	Thr	Asp	Lys
1				5					10					15	
His	Ile	Cys	Ser	Leu	Phe	Ala	Val	Leu	Pro	Phe	Phe	Phe	Gln	Val	Ala
			20					25					30		
Ile	Ser	Ala	Asp	Val	Lys	Glu	Val	Leu	Leu	Thr	Asp	Gly	Asn	Glu	Lys
		35				40						45			
Ala	Ile	Arg	Asn	Val	Gln	Asp	Ile	Ile	Thr	Arg	Asn	Gln	Lys	Ala	Gly
	50					55					60				
Val	Phe	Lys	Thr	Gln	Lys	Ile	Ser	Ser	Cys	Val	Leu	Arg	Trp	Asp	Asn
65				70					75					80	
Glu	Thr	Asp	Val	Ser	Gln	Leu	Glu	Gly	His	Phe	Asp	Ile	Val	Met	Cys
			85					90					95		
Ala	Asp	Cys	Leu	Phe	Leu	Asp	Gln	Tyr	Arg	Ala	Ser	Leu	Val	Asp	Ala
			100					105					110		
Ile	Lys	Arg	Leu	Leu	Gln	Pro	Arg	Gly	Lys	Ala	Met	Val	Phe	Ala	Pro
		115				120						125			
Arg	Arg	Gly	Asn	Thr	Leu	Asn	Gln	Phe	Cys	Asn	Leu	Ala	Glu	Lys	Ala
		130				135					140				
Gly	Phe	Cys	Ile	Gln	Arg	His	Glu	Asn	Tyr	Asp	Glu	His	Ile	Ser	Asn
145				150					155					160	
Phe	His	Ser	Lys	Leu	Lys	Lys	Glu	Asn	Pro	Asp	Ile	Tyr	Glu	Glu	Asn

165 170 175
 Leu His Tyr Pro Pro Leu Leu Ile Leu Thr Lys His Gly
 180 185

<210> 3651

<211> 2469

<212> DNA

<213> Homo sapiens

<400> 3651

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 120
 tttgaagggg cactgtgggt catcctgaac atgcccgaagg gaacagagtt tgggattgac
 180
 tataactcct gggaggtcgg gcccaagttc cggggcggtga agatgatccc tccaggcatc
 240
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 300
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 360
 gaagaggtag acctgtcccc agccccagag tctgaggtgg aggccatgag ggccaacctc
 420
 caggagctgg accagttcct ggggccttac ccatatgcc aacctgaaga gtggatctca
 480
 ctcaccaact tcacagcga agccacagtg gagaagctac agcccgagaa tcgacagatc
 540
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 600
 cagaatctac ccgctgtgg cattgagtgc aaaagctacc aagagggcct ggcccggcta
 660
 ccagagatga agcccagagc cgggacagag atccgcttct cagagctgcc cacgcagatg
 720
 ttcccagagg gtgccacgcc agctgagata accaagcaca gcatggacct gagctatgcc
 780
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 840
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 900
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 960
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 1020
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 1080
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 1140
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<210> 3652

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

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			20				25					30			
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
	35						40				45				
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

	50					55					60				
Lys 65	Ala	Asn	Pro	Lys	Glu 70	Val	Gly	Pro	Arg	Met 75	Gly	Phe	Phe	Leu 80	Ser
Leu	His	Gln	Arg	Gly 85	Leu	Thr	Val	Leu	Arg 90	Trp	Ser	Thr	Leu	Arg 95	Glu
Glu	Val	Asp	Leu	Ser 100	Pro	Ala	Pro	Glu	Ser 105	Glu	Val	Glu	Ala	Met 110	Arg
Ala	Asn	Leu	Gln	Glu	Leu	Asp	Gln	Phe	Leu	Gly	Pro	Tyr	Pro	Tyr 125	Ala
Thr	Leu	Lys	Lys	Trp	Ile	Ser	Leu	Thr	Asn	Phe	Ile	Ser	Glu	Ala	Thr
Val 145	Glu	Lys	Leu	Gln	Pro	Glu	Asn	Arg	Gln	Ile	Cys	Ala	Phe	Ser	Asp 160
Val	Leu	Pro	Val	Leu	Ser	Met	Lys	His	Thr	Lys	Asp	Arg	Val	Gly	Gln
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Ala	Arg	Leu	Pro	Glu	Met	Lys	Pro	Arg	Ala	Gly	Thr	Glu	Ile	Arg	Phe
Ser	Glu	Leu	Pro	Thr	Gln	Met	Phe	Pro	Glu	Gly	Ala	Thr	Pro	Ala	Glu
Ile 225	Thr	Lys	His	Ser	Met	Asp	Leu	Ser	Tyr	Ala	Leu	Glu	Thr	Val	Leu 240
Ile	Lys	Gln	Phe	Pro	Ser	Ser	Pro	Gln	Asp	Val	Leu	Gly	Glu	Leu	Gln
Phe	Ala	Phe	Val	Cys	Phe	Leu	Leu	Gly	Asn	Val	Tyr	Glu	Ala	Phe	Glu
His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met
Met	Lys	His	His	Thr	Leu	Tyr	Ile	Asn	Leu	Met	Ser	Ile	Leu	Tyr	His
Gln 305	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln 320
Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys
Ser	Ile	Ala	Val	Asp	Ala	Thr	Leu	Arg	Lys	Lys	Ala	Glu	Lys	Phe	Gln
Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu
Asp	Cys	Ala	Pro	Val	Val	Val	Glu	Leu	Pro	Glu	Gly	Ile	Glu	Met	Gly

<210> 3653

<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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120

tcttctccac tggagatgct ccttcagctc agcaggacgc tagctcggaa ctcaqactgc

180

acattttttgc ggattgggag gagggccgac gccgtggccg gatagtctct ggagctgcct
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<210> 3654
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 3654
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 20 25 30
 Gln Ala Val Phe Ser Thr Gly Asp Ala Pro Ser Ala Gln Gln Asp Ala
 35 40 45
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg
 50 55 60
 Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro
 65 70 75 80
 Val Gly Ile Phe Ser Thr Pro Arg
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<210> 3655
 <211> 3477
 <212> DNA
 <213> Homo sapiens

<400> 3655
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 300
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 420
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 600
 cagcacacca accctgacgc tcccatcaca gatgctgac attcttcac ggacccctt
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 720

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2340

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<210> 3656

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25					30		
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40				45				
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50					55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

65					70					75				80	
Glu	Gln	Glu	Lys	Ile	Asp	Lys	Leu	Met	Ile	Glu	Met	Asp	Gly	Thr	Glu
				85					90					95	
Asn	Lys	Ser	Lys	Phe	Gly	Ala	Asn	Ala	Ile	Leu	Gly	Val	Ser	Leu	Ala
			100					105					110		
Val	Cys	Lys	Ala	Gly	Ala	Val	Glu	Lys	Gly	Val	Pro	Leu	Tyr	Arg	His
		115					120				125				
Ile	Ala	Asp	Leu	Ala	Gly	Asn	Ser	Glu	Val	Ile	Leu	Pro	Val	Pro	Ala
	130					135				140					
Phe	Asn	Val	Ile	Asn	Gly	Gly	Ser	His	Ala	Gly	Asn	Lys	Leu	Ala	Met
145				150						155				160	
Gln	Glu	Phe	Met	Ile	Leu	Pro	Val	Gly	Ala	Ala	Asn	Phe	Arg	Glu	Ala
			165					170					175		
Met	Arg	Ile	Gly	Ala	Glu	Val	Tyr	His	Asn	Leu	Lys	Asn	Val	Ile	Lys
		180					185					190			
Glu	Lys	Tyr	Gly	Lys	Asp	Ala	Thr	Asn	Val	Gly	Asp	Glu	Gly	Gly	Phe
	195						200				205				
Ala	Pro	Asn	Ile	Leu	Glu	Asn	Lys	Glu	Gly	Leu	Glu	Leu	Lys	Thr	
	210					215				220					
Ala	Ile	Gly	Lys	Ala	Gly	Tyr	Thr	Asp	Lys	Val	Val	Ile	Gly	Met	Asp
225				230						235				240	
Val	Ala	Ala	Ser	Glu	Phe	Phe	Arg	Ser	Gly	Lys	Tyr	Asp	Leu	Asp	Phe
			245					250					255		
Lys	Ser	Pro	Asp	Asp	Pro	Ser	Arg	Tyr	Ile	Ser	Pro	Asp	Gln	Leu	Ala
		260					265					270			
Asp	Leu	Tyr	Lys	Ser	Phe	Ile	Lys	Asp	Tyr	Pro	Val	Val	Ser	Ile	Glu
	275						280				285				
Asp	Pro	Phe	Asp	Gln	Asp	Asp	Trp	Gly	Ala	Trp	Gln	Lys	Phe	Thr	Ala
	290				295					300					
Ser	Ala	Gly	Ile	Gln	Val	Val	Gly	Asp	Asp	Leu	Thr	Val	Thr	Asn	Pro
305				310						315				320	
Lys	Arg	Ile	Ala	Gln	Ala	Val	Asn	Glu	Lys	Ser	Cys	Asn	Cys	Leu	Leu
			325					330					335		
Leu	Lys	Val	Asn	Gln	Ile	Gly	Ser	Val	Thr	Glu	Ser	Leu	Gln	Ala	Cys
		340					345					350			
Lys	Leu	Ala	Gln	Ala	Asn	Gly	Trp	Gly	Val	Met	Val	Ser	His	Arg	Ser
	355					360						365			
Gly	Glu	Thr	Glu	Asp	Thr	Phe	Ile	Ala	Asp	Leu	Val	Val	Gly	Leu	Cys
	370				375					380					
Thr	Gly	Gln	Ile	Lys	Thr	Gly	Ala	Pro	Cys	Arg	Ser	Glu	Arg	Leu	Ala
385				390						395				400	
Lys	Tyr	Asn	Gln	Leu	Leu	Arg	Ile	Glu	Glu	Glu	Leu	Gly	Ser	Lys	Ala
			405					410					415		
Lys	Phe	Ala	Gly	Arg	Asn	Phe	Arg	Asn	Pro	Leu	Ala	Lys			
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<210> 3657

<211> 337

<212> DNA

<213> Homo sapiens

<400> 3657

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 240
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 300
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 337

<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

Met	Cys	His	Met	Phe	Ile	Phe	Ser	Ser	Arg	Arg	Thr	Arg	Ala	Gly	Val
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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35					40					45			
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
		50				55					60				
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65					70					75				80	
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
			85						90					95	

Arg Thr Arg

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 180
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 420
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 720
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 780
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<210> 3660

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3660

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			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
		35				40					45				
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50				55					60					
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
65					70				75					80	
Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
			85					90						95	
Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
			100					105					110		
Glu	Asn	Lys	Ser	Lys	Met	Lys	Met	Val	Glu	Glu	His	Met	Glu	Gln	Gln
		115				120						125			
Lys	Glu	Asn	Met	Glu	His	Leu	Lys	Ser	Leu	Lys	Ile	Glu	Ala	Glu	Asn
		130				135					140				
Lys	Tyr	Asp	Ala	Ile	Lys	Phe	Lys	Ile	Asn	Gln	Leu	Ser	Glu	Leu	Ala
145					150				155					160	
Asp	Pro	Leu	Lys	Asp	Glu	Leu	Asn	Leu	Ala	Asp	Ser	Glu	Val	Asp	Asn
			165					170						175	
Gln	Lys	Arg	Gly	Lys	Arg	His	Tyr	Glu	Lys	Lys	Gln	Lys	Glu	His	Leu
			180					185					190		
Asp	Thr	Leu	Asn	Lys	Lys	Lys	Arg	Glu	Leu	Asp	Met	Lys	Glu	Lys	Glu
		195					200					205			
Leu	Glu	Glu	Lys	Met	Ser	Gln	Ala	Arg	Gln	Ile	Cys	Pro	Glu	Arg	Ile

210	215	220
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Arg Gln Lys Ile Gln Ala Glu His Ala Ser His Gly Asp Arg Glu Glu		240
	245	250
Ile Met Arg Gln Tyr Gln Glu Ala Arg Glu Thr Tyr Leu Asp Leu Asp		255
	260	265
Ser Lys Val Arg Thr Leu Lys Lys Phe Ile Lys Leu Leu Gly Glu Ile		270
	275	280
Met Glu His Arg Phe Lys Thr Tyr Gln Gln Phe Arg Arg Cys Leu Thr		285
	290	295
Leu Arg Cys Lys Leu Tyr Phe Asp Asn Leu Leu Ser Gln Arg Ala Tyr		300
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<211> 1117

<212> DNA

<213> Homo sapiens

<400> 3661

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<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile
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Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr
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 <212> DNA
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Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
35          40          45
Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
50          55          60
Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val
65          70          75          80
Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys
85          90          95
Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser

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<212> DNA

<213> Homo sapiens

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<211> 1728

<212> PRT

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<400> 3666

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Asn	Phe	Asp	Val	Asp	Asp	Asp	Val	Leu	Arg	Asn	Thr	Glu	Ile	Leu Pro
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Pro	Gly	Ser	His	Thr	Gly	Phe	Ser	Gly	Leu	His	Leu	Pro	Phe	Ile Gly
385					390					395				400
Phe	Thr	Phe	Thr	Thr	Glu	Ser	Cys	Phe	Ser	Asp	Arg	Gly	Ser	Leu Lys
				405					410					415
Ser	Ile	Met	Gln	Ser	Asn	Thr	Leu	Thr	Lys	Asp	Glu	Asp	Val	Gln Arg
			420					425					430	
Asp	Leu	Glu	His	Ser	Leu	Gln	Met	Glu	Ala	Tyr	Glu	Arg	Arg	Ile Arg
		435					440					445		
Arg	Leu	Glu	Gln	Glu	Lys	Leu	Glu	Leu	Ser	Arg	Lys	Leu	Gln	Glu Ser
	450					455					460			
Thr	Gln	Thr	Val	Gln	Ser	Leu	His	Gly	Ser	Ser	Arg	Ala	Leu	Ser Asn
465					470					475				480
Ser	Asn	Arg	Asp	Lys	Glu	Ile	Lys	Lys	Leu	Asn	Glu	Glu	Ile	Glu Arg
				485					490					495
Leu	Lys	Asn	Lys	Ile	Ala	Asp	Ser	Asn	Arg	Leu	Glu	Arg	Gln	Leu Glu
			500					505					510	
Asp	Thr	Val	Ala	Leu	Arg	Gln	Glu	Arg	Glu	Asp	Ser	Thr	Gln	Arg Leu
		515					520					525		
Arg	Gly	Leu	Glu	Lys	Gln	His	Arg	Val	Val	Arg	Gln	Glu	Lys	Glu Glu
	530					535					540			
Leu	His	Lys	Gln	Leu	Val	Glu	Ala	Ser	Glu	Arg	Leu	Lys	Ser	Gln Ala
545					550					555				560
Lys	Glu	Leu	Lys	Asp	Ala	His	Gln	Gln	Arg	Lys	Leu	Ala	Leu	Gln Glu
				565					570					575
Phe	Ser	Glu	Leu	Asn	Glu	Arg	Met	Ala	Glu	Leu	Arg	Ala	Gln	Lys Gln
			580					585					590	
Lys	Val	Ser	Arg	Gln	Leu	Arg	Asp	Lys	Glu	Glu	Glu	Met	Glu	Val Ala
		595					600					605		
Thr	Gln	Lys	Val	Asp	Ala	Met	Arg	Gln	Glu	Met	Arg	Arg	Ala	Glu Lys
	610					615						620		
Leu	Arg	Lys	Glu	Leu	Glu	Ala	Gln	Leu	Asp	Asp	Ala	Val	Ala	Glu Ala
625					630					635				640
Ser	Lys	Glu	Arg	Lys	Leu	Arg	Glu	His	Ser	Glu	Asn	Phe	Cys	Lys Gln
				645					650					655
Met	Glu	Ser	Glu	Leu	Glu	Ala	Leu	Lys	Val	Lys	Gln	Gly	Gly	Arg Gly

660										665					670						
Ala	Gly	Ala	Thr	Leu	Glu	His	Gln	Gln	Glu	Ile	Ser	Lys	Ile	Lys	Ser						
		675						680				685									
Glu	Leu	Glu	Lys	Lys	Val	Leu	Phe	Tyr	Glu	Glu	Glu	Leu	Val	Arg	Arg						
		690				695					700										
Glu	Ala	Ser	His	Val	Leu	Glu	Val	Lys	Asn	Val	Lys	Lys	Glu	Val	His						
705					710					715					720						
Asp	Ser	Glu	Ser	His	Gln	Leu	Ala	Leu	Gln	Lys	Glu	Ile	Leu	Met	Leu						
				725					730					735							
Lys	Asp	Lys	Leu	Glu	Lys	Ser	Lys	Arg	Glu	Arg	His	Asn	Glu	Met	Glu						
			740					745					750								
Glu	Ala	Val	Gly	Thr	Ile	Lys	Asp	Lys	Tyr	Glu	Arg	Glu	Arg	Ala	Met						
		755					760					765									
Leu	Phe	Asp	Glu	Asn	Lys	Lys	Leu	Thr	Ala	Glu	Asn	Glu	Lys	Leu	Cys						
		770				775					780										
Ser	Phe	Val	Asp	Lys	Leu	Thr	Ala	Gln	Asn	Arg	Gln	Leu	Glu	Asp	Glu						
785					790					795					800						
Leu	Gln	Asp	Leu	Ala	Ala	Lys	Lys	Glu	Ser	Val	Ala	His	Trp	Glu	Ala						
				805					810					815							
Gln	Ile	Ala	Glu	Ile	Ile	Gln	Trp	Val	Ser	Asp	Glu	Lys	Asp	Ala	Arg						
			820					825					830								
Gly	Tyr	Leu	Gln	Ala	Leu	Ala	Ser	Lys	Met	Thr	Glu	Glu	Leu	Glu	Ala						
		835					840					845									
Leu	Arg	Ser	Ser	Ser	Leu	Gly	Ser	Arg	Thr	Leu	Asp	Pro	Leu	Trp	Lys						
	850					855					860										
Val	Arg	Arg	Ser	Gln	Lys	Leu	Asp	Met	Ser	Ala	Arg	Leu	Glu	Leu	Gln						
865					870					875					880						
Ser	Ala	Leu	Glu	Ala	Glu	Ile	Arg	Ala	Lys	Gln	Leu	Val	Gln	Glu	Glu						
				885					890					895							
Leu	Arg	Lys	Val	Lys	Asp	Ala	Asn	Leu	Thr	Leu	Glu	Ser	Lys	Leu	Lys						
			900					905					910								
Asp	Ser	Glu	Ala	Lys	Asn	Arg	Glu	Leu	Leu	Glu	Glu	Met	Glu	Ile	Leu						
		915					920						925								
Lys	Lys	Lys	Met	Glu	Glu	Lys	Phe	Arg	Ala	Asp	Thr	Gly	Leu	Lys	Leu						

1090	1095	1100
Val Asp Val Gln Arg Gly Ile Gly Thr Ala Tyr Lys Gly His Val Lys		
1105	1110	1115
Val Pro Lys Pro Thr Gly Val Lys Lys Gly Trp Gln Arg Ala Tyr Ala		1120
	1125	1130
Val Val Cys Asp Cys Lys Leu Phe Leu Tyr Asp Leu Pro Glu Gly Lys		1135
	1140	1145
Ser Thr Gln Pro Gly Val Ile Ala Ser Gln Val Leu Asp Leu Arg Asp		1150
	1155	1160
Asp Glu Phe Ser Val Ser Ser Val Leu Ala Ser Asp Val Ile His Ala		1165
	1170	1175
Thr Arg Arg Asp Ile Pro Cys Ile Phe Arg Val Thr Ala Ser Leu Leu		1180
1185	1190	1195
Gly Ala Pro Ser Lys Thr Ser Ser Leu Leu Ile Leu Thr Glu Asn Glu		1200
	1205	1210
Asn Glu Lys Arg Lys Trp Val Gly Ile Leu Glu Gly Leu Gln Ser Ile		1215
	1220	1225
Leu His Lys Asn Arg Leu Arg Asn Gln Val Val His Val Pro Leu Glu		1230
	1235	1240
Ala Tyr Asp Ser Ser Leu Pro Leu Ile Lys Ala Ile Leu Thr Ala Ala		1245
	1250	1255
Ile Val Asp Ala Asp Arg Ile Ala Val Gly Leu Glu Glu Gly Leu Tyr		1260
1265	1270	1275
Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
	1285	1290
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		1295
	1300	1305
Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		1310
	1315	1320
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		1325
	1330	1335
Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		1340
1345	1350	1355
Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
	1365	1370
Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		1375
	1380	1385
Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		1390
	1395	1400
Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		1405
	1410	1415
Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		1420
1425	1430	1435
Phe Asp Ala Leu Cys Ala Val Glu Leu Glu Ser Glu Glu Tyr Leu Leu		1440
	1445	1450
Cys Phe Ser His Met Gly Leu Tyr Val Asp Pro Gln Gly Arg Arg Ala		1455
	1460	1465
Arg Ala Gln Glu Leu Met Trp Pro Ala Ala Pro Val Ala Cys Ser Cys		1470
	1475	1480
Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		1485
	1490	1495
Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		1500
1505	1510	1515
Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

					1525					1530					1535	
Pro	Arg	Leu	Ile	Tyr	Phe	Lys	Ser	Lys	Phe	Ser	Gly	Ala	Val	Leu	Asn	
			1540						1545				1550			
Val	Pro	Asp	Thr	Ser	Asp	Asn	Ser	Lys	Lys	Gln	Met	Leu	Arg	Thr	Arg	
		1555					1560					1565				
Ser	Lys	Arg	Arg	Phe	Val	Phe	Lys	Val	Pro	Glu	Glu	Glu	Arg	Leu	Gln	
	1570					1575					1580					
Gln	Arg	Arg	Glu	Met	Leu	Arg	Asp	Pro	Glu	Leu	Arg	Ser	Lys	Met	Ile	
1585					1590					1595					1600	
Ser	Asn	Pro	Thr	Asn	Phe	Asn	His	Val	Ala	His	Met	Gly	Pro	Gly	Asp	
				1605					1610					1615		
Gly	Met	Gln	Val	Leu	Met	Asp	Leu	Pro	Leu	Ser	Ala	Val	Pro	Pro	Ser	
			1620					1625				1630				
Gln	Glu	Glu	Arg	Pro	Gly	Pro	Ala	Pro	Thr	Asn	Leu	Ala	Arg	Gln	Pro	
		1635					1640				1645					
Pro	Ser	Arg	Asn	Lys	Pro	Tyr	Ile	Ser	Trp	Pro	Ser	Ser	Gly	Gly	Ser	
	1650					1655				1660						
Glu	Pro	Ser	Val	Thr	Val	Pro	Leu	Arg	Ser	Met	Ser	Asp	Pro	Asp	Gln	
1665					1670					1675					1680	
Asp	Phe	Asp	Lys	Glu	Pro	Asp	Ser	Asp	Ser	Thr	Lys	His	Ser	Thr	Pro	
			1685						1690					1695		
Ser	Asn	Ser	Ser	Asn	Pro	Ser	Gly	Pro	Pro	Ser	Pro	Asn	Ser	Pro	His	
		1700						1705				1710				
Arg	Ser	Gln	Leu	Pro	Leu	Glu	Gly	Leu	Glu	Gln	Pro	Ala	Cys	Asp	Thr	
		1715					1720					1725				

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<210> 3667
<211> 505
<212> DNA
<213> Homo sapiens
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<400> 3667
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120
tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag
180
atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtggttta acacagatga
240
agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga
300
tgatattatg gatccaataa gttaaattcat ggaaaggaag aaattaaaag aaagtgagga
360
aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc
420
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480
ttctccggga tcacctggat cccca
505

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<210> 3668
<211> 117
<212> PRT
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<213> Homo sapiens

<400> 3668

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Leu Glu Asp Glu Glu Glu Met Trp Phe Asn Thr Asp Glu Asp Asp Met
           20           25           30
Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
           35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
           50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
           85           90           95
Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
           100          105          110
Ser Pro Gly Ser Pro
           115

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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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cttgactccc agcattctca tctcaccttg ccatactata agatgtctgg tttgtctatg
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120
ggattaatct tttacattaa tcattcactt tatgaaaacc tggatgaaga attaatgaa
180
gaattagcag caaaagtggg tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgccatgag ctatctaagg
300
aagatggata cttctggggt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
ttggtgtgtg gcttcatttt ggaaccacgc ctgttgattc aacacaggaa gggacagatt
480
gttccaactg agcttgcgac tcacttgaag gagactcagc caggattgct tgtggcttca
540
gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
600
gtgctttgtg gtaaggatga agataccatc cctcagctct tgatagactt ttgggaagct
660
cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
780
gaggatctga taaatgcctg tagtcattat ggcttaattt atccatgggt tcacgtcgta
840

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atatcatctg attcttttagc tgataaaaat tatacagaag atcttttcaaa attacagtct
 900
 cttatatgtg gtccttcatt tgacatagct tccattattc cgttcttgga gccactttca
 960
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat
 1020
 gaacagtgca tagacatact gtttagagaga tgcccggagg cagtcattcc atatgcta
 1080
 catgaactga aagaagagaa cgggactctg tgggtggaaaa aactgttgcc tgaactttgt
 1140
 cagagaataa aatgtggtgg agagaagtat caactctacc tgtcatcatt aaaagcttaa
 1200
 ttttcacggg aactgtggaa gctagc
 1226

<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35					40					45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55				60					
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
				85					90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115					120					125			
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130						135					140			
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155					160
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165						170					175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180					185					190		
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
	195						200					205			
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215						220			
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235					240
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245						250					255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

	260		265		270										
Ala	Asp	Lys	Asn	Tyr	Thr	Glu	Asp	Leu	Ser	Lys	Leu	Gln	Ser	Leu	Ile
	275		280		285										
Cys	Gly	Pro	Ser	Phe	Asp	Ile	Ala	Ser	Ile	Ile	Pro	Phe	Leu	Glu	Pro
	290		295		300										
Leu	Ser	Glu	Asp	Thr	Ile	Ala	Gly	Leu	Ser	Val	His	Val	Leu	Cys	Arg
305			310		315										320
Thr	Arg	Leu	Lys	Glu	Tyr	Glu	Gln	Cys	Ile	Asp	Ile	Leu	Leu	Glu	Arg
			325		330										335
Cys	Pro	Glu	Ala	Val	Ile	Pro	Tyr	Ala	Asn	His	Glu	Leu	Lys	Glu	Glu
			340		345										350
Asn	Arg	Thr	Leu	Trp	Trp	Lys	Lys	Leu	Leu	Pro	Glu	Leu	Cys	Gln	Arg
			355		360										
Ile	Lys	Cys	Gly	Gly	Glu	Lys	Tyr	Gln	Leu	Tyr	Leu	Ser	Ser	Leu	Lys
	370				375						380				
Ala															
385															

<210> 3671

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3671

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120
agggcatctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcatggctc
180
gatggaaaga taagcaagaa gagttaattt ctaatcaata tgataaaaag gtcagagagc
240
agtttctgaa aaacatgttt ttgagttgag tcctgaaaga caaggagatg ttagtaaagc
300
agagaaggga gaattcattc tagaaagatc agacaatgtg tgggaagggc agagtctgaa
360
aagagcatgc ccatttggga gaagcatcaa gaagcccacg cgtagaagc accggcccca
420
tgagacaaag acacagctag agagattgac taggcatgt cggaatgtcc tcttatttta
480
tacatacata agcatataga tacatatagc caaagttacc tttttaatga tcttttttac
540
ccagtgtatt ctggaggtcg aatggtcaca tatgaacatc tccgagaggt tgtgtttggc
600
aaaagtgaag atgagcatta tcccctttgg aaatcagtca ttggagggat gatggctggt
660
gttattggcc agtttttagc caatccaact gacctagtga aggttcagat gcaaattgaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
780
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828

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<210> 3672

<211> 124
 <212> PRT
 <213> Homo sapiens

<400> 3672

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Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr Ser
          20          25          30
Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
          35          40          45
Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
          50          55          60
Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
65          70          75          80
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
          85          90          95
Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
          100         105         110
Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
          115          120

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<210> 3673
 <211> 1052
 <212> DNA
 <213> Homo sapiens

<400> 3673

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180
aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc
240
acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
300
gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa
360
gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt
420
ttgcatccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca
480
ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aatacccctg
540
gattgctgtc gccttggtta atatgatgag tttcatgatt atctagaacg gtcatatgaa
600
ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt
660
gatctgctgt tggagacgag aaagcctgat caggttttcc aatcttataa acctggaggg
720
gagccatttt acaccatttt tagttggctc gtacttagaa ttttcctgag aaaggttttt
780

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tttttattgt agcaatgaac ataatttaca ttttgtatat ggtcttaca tgtagaataa
 840
 ttttgacagg ttgagaagta ctcagcacca gcttggaatt aagttctaga ttacttgcaa
 900
 agagttgtgt acataatttt aaaaacaaca aaaaacaaca aagcttctag cttacgggtct
 960
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 1020
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 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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		20					25						30		
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp
	35						40					45			
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly
	50					55					60				
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser
65				70					75					80	
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn
			85					90					95		
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu
		100					105					110			
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu
	115					120					125				
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Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His
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Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly
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Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu
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<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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<210> 3676

<211> 154

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<213> Homo sapiens

<400> 3676

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Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
          35          40          45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
          50          55          60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
          65          70          75          80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
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Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
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Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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<210> 3677
 <211> 418
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<210> 3678
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 Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp
 35 40 45
 Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His
 50 55 60
 Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser
 65 70 75 80
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly
 85 90 95
 Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu
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<210> 3679
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3679

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<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680

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			20				25						30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
		35					40					45			
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
	50					55					60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65				70					75					80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
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Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105						110	
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
		115					120						125		
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
	130						135				140				
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
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Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
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 <212> DNA
 <213> Homo sapiens

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<210> 3682
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3682
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 35 40 45
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg
 50 55 60
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg
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Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile
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Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg
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Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser
145					150				155						160
Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln
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<212> DNA

<213> Homo sapiens

<400> 3683

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<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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Cys	Lys	Val	Arg	Leu	Leu	Asp	Gly	Gly	Asp	Phe	Val	Ser	Leu	Ser	Ser
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Phe	Val	Cys	Lys	Met	Ser	Ala	Asn	Pro	Ala	Thr	Gly	Leu	Leu	Asp	Pro
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Cys	Val	Phe	Arg	Val	Ser	Val	Arg	Lys	Glu	Leu	Lys	Gly	Gly	Lys	Ala
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Tyr	Ser	Lys	Leu	Gly	Phe	Ala	Asp	Leu	Asn	Leu	Ala	Glu	Phe	Ala	Gly
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Gly	Tyr	Ser	Thr	Glu	His	Ser	His	Ser	Ser	Ser	Leu	Ser	Asp	Leu	Thr
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Asp	Thr	Arg	Ile	Asp	Ala	Asp	Ala	Ile	Val	Glu	Lys	Ile	Val	Gln	Ser

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Gln	Asp	Phe	Thr	Asp	Gly	Ser	Asn	Thr	Glu	Asp	Ser	Asn	Leu	Arg	Leu
				340					345				350		
Phe	Val	Ser	Arg	Asp	Gly	Ser	Ala	Thr	Leu	Ser	Gly	Ile	Gln	Leu	Ala
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<211> 1293

<212> DNA

<213> Homo sapiens

<400> 3685

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<212> PRT

<213> Homo sapiens

<400> 3690

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Gln	Cys	Cys	Asn	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu	
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	260	265
Val Cys Phe Thr Cys Asn Arg Ser Cys Arg Val Ala Pro Leu Ile Gln		270
	275	280
Cys Asp Tyr Cys Pro Leu Leu Phe His Met Asp Cys Leu Glu Pro Pro		285
290	295	300
Leu Thr Ala Met Pro Leu Gly Arg Trp Met Cys Pro Asn His Ile Glu		305
	310	315
His Val Val Leu Asn Gln Lys Asn Met Thr Leu Ser Asn Arg Cys Gln		320
	325	330
Val Phe Asp Arg Phe Gln Asp Thr Val Ser Gln His Val Val Lys Val		335
	340	345
Asp Phe Leu Asn Arg Ile His Lys Lys His Pro Pro Asn Arg Arg Val		350
	355	360
Leu Gln Ser Val Lys Arg Arg Ser Leu Lys Val Pro Asp Ala Ile Lys		365
370	375	380
Ser Gln Tyr Gln Phe Pro Pro Pro Leu Ile Ala Pro Ala Ala Ile Arg		385
	390	395
Asp Gly Glu Leu Ile Cys Asn Gly Ile Pro Glu Glu Ser Gln Met His		400
	405	410
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	420	425
Leu Cys Ser Val Val Ala Leu Gln Cys Ser Ile Leu Lys His Leu Ser		430
	435	440
Ala Lys Gln Met Pro Ser His Trp Asp Ser Glu Gln Thr Glu Lys Ala		445
	450	455
Asp Ile Lys Pro Val Ile Val Thr Asp Ser Ser Val Thr Thr Ser Leu		460
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Gln Thr Ala Asp Lys Thr Pro Thr Pro Ser His Tyr Pro Leu Ser Cys		480
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<212> DNA

<213> Homo sapiens

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<211> 94

<212> PRT

<213> Homo sapiens

<400> 3692

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			20					25					30		
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Phe	Tyr	Val	Leu	Arg	Gln
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<212> DNA

<213> Homo sapiens

<400> 3693

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<212> PRT

<213> Homo sapiens

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			20					25					30	Gly
Cys	Cys	Ala	Pro	Leu	Gly	Val	Arg	Ala	Ser	Gly	Arg	Ala	Val	Pro
		35					40					45		Arg
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Cys	Leu	Arg	Val	Asn	Pro	Leu	Ser	Pro	Leu	His	Asn	Phe	Arg	Ser
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305	310	315
Ala Ala Ala Ala Thr	Ala Ala His Ser Phe	Pro Leu Ser Phe Ala
325	330	335
Gly Ala Phe Pro Met Leu	Pro Pro Asn Ala Ala	Ala Val Ala Ala
340	345	350
Ala Thr Ala Ile Ser Pro	Pro Leu Ser Val Ser	Ala Thr Ser Ser Pro
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<211> 1615

<212> DNA

<213> Homo sapiens

<400> 3695

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<210> 3696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3696

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			20					25					30		
Tyr	Phe	Ala	Glu	Tyr	Trp	Tyr	Gln	Ala	Gln	Cys	Cys	Gln	Tyr	Asp	Tyr
		35					40					45			
Cys	Asn	Ser	Trp	Ser	Ser	Pro	Gln	Leu	Gln	Ser	Ser	Leu	Pro	Glu	Pro
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His	Asp	Arg	Pro	Leu	Ala	Leu	Pro	Leu	Ser	Asp	Ser	Gln	Ile	Gln	Trp
65					70					75				80	
Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
			85						90				95		
Gly	Thr	Glu	Pro	Asp	Gly	Leu	Asp	Pro	Met	Val	Thr	Leu	Ser	Leu	Asn
			100					105				110			
Leu	Gly	Leu	Ser	Phe	Ala	Glu	Leu	Arg	Arg	Met	Tyr	Leu	Phe	Leu	Asn
		115					120					125			
Ser	Ser	Gly	Leu	Leu	Val	Leu	Pro	Gln	Ala	Gly	Leu	Leu	Thr	Pro	His
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<210> 3697

<211> 550

<212> DNA

<213> Homo sapiens

<400> 3697

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<210> 3698

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3698

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Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Val	Cys	Gln	Pro	Arg	Cys	35	40	45	
Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro	Gly	50	55	60	
Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu	Asn	Glu	Cys	Gly	Leu	Lys	65	70	75	80
Pro	Arg	Pro	Cys	Lys	His	Arg	Cys	Met	Asn	Thr	Tyr	Gly	Ser	Tyr	Lys	85	90	95	
Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser	100	105	110	
Ser	Ala	Leu	Thr	Cys	Ser	Met	Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val	115	120	125	
Val	Lys	Gly	Gln	Ile	Arg	Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	Gln	Leu	130	135	140	
Ala	Pro	Asp	Gly	Arg	Thr	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Gly	145	150	155	160
Arg	Ala	Ser	Cys	Pro	Lys	Phe	Arg	Gln	Cys	Val	Asn	Thr	Phe	Gly	Ser	165	170	175	
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<210> 3699
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 3699
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<210> 3700
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 <212> PRT
 <213> Homo sapiens

<400> 3700
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 35 40 45
 Arg Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln
 50 55 60
 Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser
 65 70 75 80
 Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu
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 Gly Ser Val Leu Leu Pro Ser Tyr Asn Ile Arg Pro Asp Gly Pro Gly
 100 105 110
 Ala Pro Arg Gly Arg Arg Phe Thr Phe Thr Ala Glu His Pro Gly
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<210> 3701
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 <212> DNA
 <213> Homo sapiens

<400> 3701

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<210> 3702

<211> 236

<212> PRT

<213> Homo sapiens

<400> 3702

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Ser	Asn	Leu	Lys	Glu	His	Lys	Lys	Thr	His	Thr	Ala	Asp	Lys	Val	Phe	35	40	45	
Thr	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Met	Gln	Arg	Lys	Leu	Val	50	55	60	
Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala	65	70	75	80
Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg	85	90	95	
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys	100	105	110	
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys	115	120	125	
Ala	Gly	Asp	Glu	Ser	Pro	Asp	Val	Leu	Glu	Glu	Leu	Ser	Gln	Ala	Ile	130	135	140	
Glu	Thr	Ser	Asp	Leu	Glu	Lys	Ser	Gln	Ser	Ser	Asp	Ser	Phe	Ser	Gln	145	150	155	160
Asp	Thr	Ser	Val	Thr	Leu	Met	Pro	Val	Ser	Val	Lys	Leu	Pro	Val	His				

				165					170					175		
Pro	Val	Glu	Asn	Ser	Val	Ala	Glu	Phe	Asp	Ser	His	Ser	Gly	Gly	Ser	
			180					185					190			
Tyr	Cys	Lys	Leu	Arg	Ser	Met	Ile	Gln	Pro	His	Gly	Val	Ser	Asp	Gln	
		195					200					205				
Glu	Lys	Leu	Ser	Leu	Asp	Pro	Gly	Lys	Leu	Ala	Lys	Pro	Gln	Ile	His	
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<210> 3703

<211> 3294

<212> DNA

<213> Homo sapiens

<400> 3703

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<210> 3704

<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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Leu	His	Leu	Leu	Lys	Ser	Ser	Cys	Ala	Pro	Ser	Val	Gln	Met	Lys	Ile
		35					40					45			
Lys	Glu	Leu	Tyr	Arg	Arg	Arg	Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser
	50					55					60				
Asp	Leu	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Gly	Thr	Ser	Pro	Val	Gly	Ser
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Pro	Gly	Pro	Leu	Ala	Pro	Ile	Pro	Pro	Thr	Leu	Leu	Ala	Pro	Gly	Thr
				85					90					95	
Leu	Leu	Gly	Pro	Lys	Arg	Glu	Val	Asp	Met	His	Pro	Pro	Leu	Pro	Gln
			100					105					110		
Pro	Val	His	Pro	Asp	Val	Thr	Met	Lys	Pro	Leu	Pro	Phe	Tyr	Glu	Val
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Tyr	Gly	Glu	Leu	Ile	Arg	Pro	Thr	Thr	Leu	Ala	Ser	Thr	Ser	Ser	Gln
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Arg	Phe	Glu	Glu	Ala	His	Phe	Thr	Phe	Ala	Leu	Thr	Pro	Gln	Gln	Val
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Gln	Gln	Ile	Leu	Thr	Ser	Arg	Glu	Val	Leu	Pro	Gly	Ala	Lys	Cys	Asp
			165						170					175	
Tyr	Thr	Ile	Gln	Val	Gln	Leu	Arg	Phe	Cys	Leu	Cys	Glu	Thr	Ser	Cys
		180						185					190		
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Lys	Leu	Cys	Pro	Leu	Pro	Gly	Tyr	Leu	Pro	Pro	Thr	Lys	Asn	Gly	Ala
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Leu	Ser	Ala	Thr	Val	Pro	Asn	Thr	Ile	Val	Val	Asn	Trp	Ser	Ser	Glu
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Phe	Gly	Arg	Asn	Tyr	Ser	Leu	Ser	Val	Tyr	Leu	Val	Arg	Gln	Leu	Thr
			260						265				270		
Ala	Gly	Thr	Leu	Leu	Gln	Lys	Leu	Arg	Ala	Lys	Gly	Ile	Arg	Asn	Pro
		275					280				285				
Asp	His	Ser	Arg	Ala	Leu	Ile	Lys	Glu	Lys	Leu	Thr	Ala	Asp	Pro	Asp
	290					295				300					
Ser	Glu	Val	Ala	Thr	Thr	Ser	Leu	Arg	Val	Ser	Leu	Met	Cys	Pro	Leu
305					310					315				320	
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Leu	Gln	Ser	Phe	Asp	Ala	Ala	Leu	Tyr	Leu	Gln	Met	Asn	Glu	Lys	Lys
			340					345				350			
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Gln	Pro	Ser	Ser	Val	Leu	Arg	Ser	Pro	Ala	Met	Gly	Thr	Leu	Gly	Gly
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Leu	Gly	Pro	Leu	Ala	Pro	Thr	Leu	Gly	Ser	Ser	His	Cys	Ser	Ala	Thr
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Pro	Ala	Pro	Pro	Pro	Gly	Arg	Val	Ser	Ser	Ile	Val	Ala	Pro	Gly	Gly
	580						585					590			
Ala	Leu	Arg	Glu	Gly	His	Gly	Gly	Pro	Leu	Pro	Ser	Gly	Pro	Ser	Leu
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<211> 1737

<212> DNA

<213> Homo sapiens

<400> 3705

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<210> 3706

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3706

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<210> 3707

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3707

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<210> 3708

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3708

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			20					25					30		
Glu	Asn	Ala	Phe	Asp	Asn	Ile	Gln	Leu	Pro	Tyr	Met	Ile	Lys	Thr	Leu
		35					40				45				
Lys	Lys	Leu	Gly	Ile	Glu	Gly	Met	Tyr	Leu	Asn	Val	Ile	Lys	Ala	Val
		50				55					60				
Tyr	Asp	Arg	Pro	Xaa	Val	Ser	Ile	Ile	Leu	Asn	Gly	Glu	Asn	Leu	Gln
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Glu	Leu	Gln	Thr	Phe	Gly	Leu	Arg	Ser	Gly	Thr	Gln	Gln	Gly	Cys	Pro
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Leu	Ser	Pro	Gln	Leu	Leu	Asn	Ile	Val	Leu						
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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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<210> 3710

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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Glu	Gln	Thr	Phe	Lys	Lys	Met	Glu	Asn	Tyr	Leu	Arg	His	Lys	Gln	Leu
		20						25					30		
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
		35					40					45			
Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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Leu	Arg	Gln	Ala	Gly	Trp	Glu	Gln	Met	Trp	Arg	Leu	Thr	Ala	Arg	Arg	50	55	60	
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Asn	Ala	Val	Ile	Lys	Glu	His	Pro	Gly	Leu	Val	Gln	Arg	Leu	Pro	Cys	85	90	95	
Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr	100	105	110	
Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys	115	120	125	
Leu	Arg	Val	Lys	Asn	Lys	His	Val	Glu	Phe	Phe	Arg	Asn	Phe	Tyr	Leu	130	135	140	
Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val	145	150	155	160
Cys	Pro	Ser	Gln	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu		165	170	175	
Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln	180	185	190	
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro	195	200	205	
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225		230		235		240									
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Phe	Val	Glu	Ala	Ser	Pro	Val	Leu	Ala	Ala	Arg	Gln	Asp	Val	Ala	Tyr
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<210> 3713

<211> 1719

<212> DNA

<213> Homo sapiens

<400> 3713

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<210> 3714

<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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			20					25					30		
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Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
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Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
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Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys	Leu
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Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala	Ser
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Asp	Ser	Glu	Asn	Glu	Asp	Val	Gly	Lys	His	Pro	Ala	Ser	Asp	Ser	Glu


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145          150          155          160
Ile Glu Glu Leu Gln Lys Ser Pro Ala Ser Asp Ser Glu Thr Glu Asp
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Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
          210          215          220
Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
225          230          235          240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
          245          250          255
Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
          260          265          270
Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
          275          280          285
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
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305          310          315          320
Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Ser Asp Arg Glu
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Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp
          340          345          350
Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu
          355          360          365
Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
          370          375          380
Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser
385          390          395          400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp
          405          410          415
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
          420          425          430
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
          435          440          445
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
          450          455          460
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<210> 3715

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3715

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 <211> 96
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys
 50 55 60
 Met Leu Lys Asn Leu Arg Asn Thr Asn Tyr Asp Val Phe Glu Lys Ile
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 <213> Homo sapiens

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 420
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<211> 374

<212> PRT

<213> Homo sapiens

<400> 3718

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		20						25					30		
Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
		35					40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
	50					55					60				
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
65				70					75				80		
Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
			85					90					95		
Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
		100					105						110		
Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
		115				120					125				
Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

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 145 150 155 160
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 165 170 175
 Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
 180 185 190
 Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
 195 200 205
 Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
 210 215 220
 Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
 225 230 235 240
 Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
 245 250 255
 Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
 260 265 270
 Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
 275 280 285
 Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
 290 295 300
 Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
 305 310 315 320
 Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
 325 330 335
 Leu Leu Tyr Tyr Glu Ser Gln His Gly Arg Pro Val Thr Lys Glu Glu
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 355 360 365
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<210> 3719

<211> 422

<212> DNA

<213> Homo sapiens

<400> 3719

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<400> 3720
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 35 40 45
 Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
 50 55 60
 Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His
 65 70 75 80
 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
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<210> 3721
 <211> 4728
 <212> DNA
 <213> Homo sapiens

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<210> 3722

<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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			20					25					30		
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
			35				40					45			
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
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Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
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Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
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Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
			100					105					110		
Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
		115				120						125			
Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
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Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
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Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

					165					170					175	
Tyr	Glu	Met	Phe	Gln	Asn	Ile	Leu	Gly	Ile	Lys	Lys	Phe	Glu	His	Gln	
			180					185					190			
Leu	Leu	Tyr	Asn	Ala	Cys	Gln	Leu	Asp	Asn	Pro	Asp	Glu	Gln	Ala	Ala	
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Gln	Ile	Arg	Arg	Glu	Leu	Asp	Gly	Arg	Leu	Gln	Met	Ala	Asp	Gln	Ile	
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Ala	Arg	Glu	Arg	Lys	Phe	Pro	Lys	Phe	Val	Ser	Lys	Glu	Met	Glu	Asn	
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			260					265					270			
Leu	Lys	Arg	Ser	His	Asn	Ala	Ser	Ile	Ile	Asp	Met	Gly	Glu	Glu	Ser	
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			340					345					350			
Ser	Thr	Thr	His	Ala	Leu	Pro	Ala	Val	Lys	Val	Lys	Leu	Phe	Thr	Glu	
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Ser	Thr	Gly	Val	Leu	Ala	Leu	Glu	Asp	Lys	Glu	Leu	Gly	Arg	Val	Ile	
	370					375					380					
Leu	His	Pro	Thr	Pro	Asn	Ser	Pro	Lys	Gln	Ser	Glu	Trp	His	Lys	Met	
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				485					490					495		
Asn	Ala	Val	Lys	Glu	Gly	Asp	Thr	Val	Ile	Phe	Ala	Ser	Asp	Asp	Glu	
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Gln	Asp	Leu	Phe	Ala	Pro	Leu	Val	Val	Arg	Tyr	Val	Asp	Leu	Met	Glu	
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Glu	Phe	Gly	Lys	His	Leu	Glu	Gln	Arg	Leu	Lys	Leu	Met	Ala	Ser	Asp	
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Leu	Cys	Ser	Met	Glu	Met	Gly	Gln	Glu	Phe	Ala	Lys	Met	Trp	His	Gln	
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Tyr	His	Ser	Lys	Ile	Asp	Glu	Leu	Ile	Glu	Glu	Thr	Val	Lys	Glu	Met	

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Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu						
	1060		1065		1070	
Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro						
	1075		1080		1085	
Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln						
	1090		1095		1100	
Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu						
1105		1110		1115		1120
Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu						
	1125		1130		1135	
Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu						
	1140		1145		1150	
Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val						
	1155		1160		1165	
Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg						
	1170		1175		1180	
Leu Thr Val Glu Glu Ala Thr Ala Ser Val Ser Glu Gly Gly Gly Leu						
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<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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120
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180
gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac
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300
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720

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<210> 3724
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 3724
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 Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val
 35 40 45
 Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp
 50 55 60
 Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr
 65 70 75 80
 Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu
 85 90 95
 Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr
 100 105 110
 Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile
 115 120 125
 Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His
 130 135 140
 Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg
 145 150 155 160
 Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp
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 Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile
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<210> 3725
 <211> 1244
 <212> DNA
 <213> Homo sapiens

<400> 3725
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 180
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 ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc
 300

accctgttgc attttgctgc gaagtatgga ctgaagaacc tcaactgcctt gttgctcacc
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 420
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<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

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		20					25					30			
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
	35					40					45				
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55				60					
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
65				70					75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85					90					95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
		100					105					110			
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

115 120 125
 Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys
 130 135 140
 His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr
 145 150 155 160
 Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu
 165 170 175
 Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu
 180 185 190
 Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu
 195 200 205
 Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu
 210 215 220
 Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser
 225 230 235 240
 Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser
 245 250 255
 Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu
 260 265 270
 Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp
 275 280 285
 Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala
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 Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly
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<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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 360
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 420
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 480
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<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

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			20					25					30		
Val	Thr	Pro	Thr	Pro	Ala	Gly	Thr	Leu	Asp	Pro	Ala	Glu	Lys	Gln	Glu
		35				40						45			
Thr	Gly	Cys	Pro	Pro	Leu	Gly	Leu	Glu	Ser	Leu	Arg	Val	Ser	Asp	Ser
	50					55					60				
Arg	Leu	Glu	Ala	Ser	Ser	Gln	Ser	Phe	Gly	Leu	Gly	Pro	His	Arg	
65					70				75					80	
Gly	Arg	Leu	Asn	Ile	Gln	Ser	Gly	Leu	Glu	Asp	Gly	Asp	Leu	Tyr	Asp
			85					90						95	
Gly	Ala	Trp	Cys	Ala	Glu	Glu	Gln	Asp	Ala	Asp	Pro	Trp	Phe	Gln	Val
			100					105						110	
Asp	Ala	Gly	His	Pro	Thr	Arg	Phe	Ser	Gly	Val	Ile	Thr	Gln	Gly	Arg
		115					120						125		
Asn	Ser	Val	Trp	Arg	Tyr	Asp	Trp	Val	Thr	Ser	Tyr	Lys	Val	Gln	Phe
	130					135					140				
Ser	Asn	Asp	Ser	Arg	Thr	Trp	Trp	Gly	Ser	Arg	Asn	His	Ser	Ser	Gly
145					150					155				160	
Met	Asp	Ala	Val	Phe	Pro	Ala	Asn	Ser	Asp	Pro	Glu	Thr	Pro	Val	Leu
			165					170						175	
Asn	Leu	Leu	Pro	Glu	Pro	Gln	Val	Ala	Arg	Phe	Ile	Arg	Leu	Leu	Pro
			180					185					190		
Gln	Thr	Trp	Leu	Gln	Gly	Gly	Ala	Pro	Cys	Leu	Arg	Ala	Glu	Ile	Leu
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<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct
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 420
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 480
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 600
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 660
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 720
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 780
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 1200
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 1440
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<210> 3730

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3730

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	50					55					60				
Cys	Pro	Leu	Pro	Gln	Glu	Met	Lys	Ala	Leu	Phe	Lys	Lys	Lys	Thr	Tyr
65				70						75					80
Asp	Glu	Lys	Lys	Thr	Tyr	Asp	Gln	Gln	Lys	Phe	Asp	Ser	Glu	Arg	Ala
				85					90					95	
Asp	Gly	Thr	Ile	Ser	Ser	Glu	Ile	Lys	Ser	Ala	Arg	Gly	Ser	His	His
			100					105					110		
Leu	Ser	Ile	Tyr	Ala	Glu	Asn	Ser	Leu	Lys	Ser	Asp	Gly	Tyr	His	Lys
		115					120					125			
Arg	Thr	Asp	Arg	Lys	Ser	Arg	Ile	Ile	Ala	Lys	Asn	Val	Ser	Thr	Ser
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Lys	Pro	Glu	Phe	Glu	Phe	Thr	Thr	Leu	Asp	Phe	Pro	Glu	Leu	Gln	Gly
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Ala	Glu	Asn	Asn	Met	Ser	Glu	Ile	Gln	Lys	Gln	Pro	Lys	Trp	Gly	Pro
				165					170					175	
Val	His	Ser	Val	Ser	Thr	Asp	Ile	Ser	Leu	Leu	Arg	Glu	Val	Val	Lys
			180					185					190		
Pro	Ala	Ala	Val	Leu	Ser	Lys	Gly	Glu	Ile	Val	Val	Lys	Asn	Asn	Pro
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Asn	Glu	Ser	Val	Thr	Ala	Asn	Ala	Ala	Thr	Asn	Ser	Pro	Ser	Cys	Thr
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225				230						235					240
Ser	Thr	Glu	Leu	Ser	Ala	Ala	Pro	Lys	Asn	Val	Thr	Ser	Met	Ile	Asn
				245					250					255	
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Ser	Ser	Glu	Ala	Leu	Ser	Ser	Asp	Pro	Ser	Tyr	Asn	Lys	Glu	Lys	His
		275					280					285			
Ile	Ile	His	Pro	Thr	Gln	Lys	Ser	Lys	Ala	Ser	Gln	Gly	Ser	Asp	Leu
	290					295					300				
Glu	Gln	Asn	Glu	Ala	Ser	Arg	Lys	Asn	Lys	Lys	Lys	Lys	Glu	Lys	Ser
305				310						315					320
Thr	Ser	Lys	Tyr	Glu	Val	Leu	Thr	Val	Gln	Glu	Pro	Pro	Arg	Ile	Glu
				325					330					335	
Asp	Ala	Glu	Glu	Phe	Pro	Asn	Leu	Ala	Val	Ala	Ser	Glu	Arg	Arg	Asp
				340				345					350		
Arg	Ile	Glu	Thr	Pro	Lys	Phe	Gln	Ser	Lys	Gln	Gln	Pro	Gln	Asp	Asn
		355					360					365			
Phe	Lys	Asn	Asn	Val	Lys	Lys	Ser	Gln	Leu	Pro	Val	Gln	Leu	Asp	Leu
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<211> 1704

<212> DNA

<213> Homo sapiens

<400> 3731

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<210> 3732

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3732

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			20					25					30		
Glu	Gly	Ile	Thr	Asp	Ala	Ser	Ser	Cys	Ala	Val	Leu	Leu	Pro	Ala	Ser
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	50					55				60					
Ser	Phe	Arg	Ile	Pro	Gly	Ala	Trp	Ser	Cys	Ala	Trp	Ser	Leu	Asn	Ile
65					70					75					80
Gln	Ala	Asn	Asn	Cys	Phe	Ser	Thr	Gly	Leu	Ser	Arg	Arg	Val	Leu	Leu
			85						90					95	
Thr	Asn	Val	Val	Thr	Gly	His	Arg	Gln	Ser	Phe	Gly	Thr	Asn	Ser	Asp
			100					105					110		
Val	Leu	Ala	Gln	Gln	Phe	Ala	Leu	Met	Ala	Pro	Leu	Leu	Phe	Asn	Gly
		115					120					125			
Cys	Arg	Ser	Gly	Glu	Ile	Phe	Ala	Ile	Asp	Leu	Arg	Cys	Gly	Asn	Gln
	130					135					140				
Gly	Lys	Gly	Trp	Lys	Ala	Thr	Arg	Leu	Phe	His	Asp	Ser	Ala	Val	Thr
145					150					155					160
Ser	Val	Arg	Ile	Leu	Gln	Asp	Glu	Gln	Tyr	Leu	Met	Ala	Ser	Asp	Met
			165					170						175	
Ala	Gly	Lys	Ile	Lys	Leu	Trp	Asp	Leu	Arg	Thr	Thr	Lys	Cys	Val	Arg
			180					185					190		
Gln	Tyr	Glu	Gly	His	Val	Asn	Glu	Tyr	Ala	Tyr	Leu	Pro	Leu	His	Val
	195					200						205			
His	Glu	Glu	Glu	Gly	Ile	Leu	Val	Ala	Val	Gly	Gln	Asp	Cys	Tyr	Thr
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Arg	Ile	Trp	Ser	Leu	His	Asp	Ala	Arg	Leu	Leu	Arg	Thr	Ile	Pro	Ser
225					230					235					240
Pro	Tyr	Pro	Ala	Ser	Lys	Ala	Asp	Ile	Pro	Ser	Val	Ala	Phe	Ser	Ser
				245					250					255	
Arg	Leu	Gly	Gly	Ser	Arg	Gly	Ala	Pro	Gly	Leu	Leu	Met	Ala	Val	Gly
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Gln	Asp	Leu	Tyr	Cys	Tyr	Ser	Tyr	Ser							
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<210> 3733

<211> 515

<212> DNA

<213> Homo sapiens

<400> 3733

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 180
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 300
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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734

Xaa	Gly	Arg	Ala	Val	Arg	Arg	Val	Thr	Ala	Gly	Thr	Arg	Pro	Gly	Trp
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Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
			20					25					30		
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
		35					40				45				
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
		50				55				60					
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70				75					80	
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
			85					90					95		
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
			100					105					110		
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
		115					120					125			
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135					140				
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
145					150					155				160	
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
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<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

<400> 3735

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180
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240
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300
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360
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480
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540
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660
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720
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1560

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 2400
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<210> 3736

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

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			20					25						30	
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
		35				40						45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
	50					55				60					
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75					80
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
				85				90						95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

	115		120		125										
Lys	Val	Glu	Pro	Arg	Ile	Val	Ile	Val	Glu	Glu	Ala	Ala	Glu	Val	Leu
	130					135					140				
Glu	Ala	His	Thr	Ile	Ala	Thr	Leu	Ser	Lys	Ala					
145					150					155					

<210> 3737

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3737

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<210> 3738

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3738

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           20           25           30
Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
           35           40           45
Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
           50           55           60
Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
65           70           75           80
Arg Ile Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
           85           90           95
Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
           100          105          110
His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
           115          120          125
Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
130          135          140
Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
145          150          155          160
Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
           165          170          175
Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
           180          185          190
Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
           195          200          205
Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
210          215          220
Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
225          230          235          240
Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
           245          250          255
Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
           260          265          270
Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
           275          280          285
Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
290          295          300
Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
305          310          315          320
Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
           325          330          335
Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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 420
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 480
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<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

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			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
		35					40					45			
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

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Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Ser Pro
      130              135

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<210> 3741

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3741

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120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
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<210> 3742

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3742

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Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```

```

65          70          75          80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
          85          90          95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
          100          105          110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
          115          120          125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
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<210> 3743

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3743

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120
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180
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240
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300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
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<210> 3744

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3744

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Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
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Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
20          25          30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
35          40          45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
50          55          60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65          70          75          80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
85          90          95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
100          105          110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

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115
Arg Thr Val Phe Val Phe
130

120

125

<210> 3745
<211> 345
<212> DNA
<213> Homo sapiens

<400> 3745
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120
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac
180
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga
240
tgcagcatct gctccggacg cctctcgtg tgggtgccag gcctgccagg ccaagccccg
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345

<210> 3746
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3746
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Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val
20 25 30
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr
35 40 45
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile
50 55 60
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys
65 70 75 80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly
85 90 95
Arg His Val Trp Ala Asp
100

<210> 3747
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3747
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120

aagggggcgc gcccggccac tttctgcctg agccccgcac cctctctggt ggtctcctct
 180
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 240
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 300
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 360
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 420
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 480
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<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

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Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
			20					25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35				40						45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50				55				60						
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65				70				75						80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
			85			90							95		
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
		100				105						110			
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
	115				120							125			
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
	130				135										

<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749

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 120
 ggctactcca tgccctggga gggatcgaca agcaagcaga tgccccccag tgatgctgaa
 180
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 240
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 360
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 420
 gccttagagc tgcgggaaca ccgagacccc ccgtccttca gcctcgacct ggggtgcaggc
 480
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 540
 ttgtacttta attattgttt tgccttggtg ctgtgacctc cctaagacac tgaagatact
 600
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 648

<210> 3750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5					10					15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35				40					45				
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55						60				
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65					70				75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85					90						95	
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

<210> 3751

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3751

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cctggccccg ctgctgctcg cggctcggtc gccccgagcg gggccaaggg cgtttcctac
 120
 acgcagggcc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca
 180
 gggccagctt ttcttgatg attccaaaat gaagaatttc atcacctgct tcaaagaccc
 240
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 300
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 360
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 420
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 caacgggcgc ctgtaccacc cggcgccgga gcgtgcgggc ggcgtggggc tgggtgcgcc
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 554

<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

Ala	Arg	Leu	Ser	Ala	Leu	Ala	Arg	Ala	Leu	Ala	Gly	Pro	Pro	Pro	Arg
1				5					10					15	
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20					25					30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35					40					45			
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
	50					55					60				
Pro	Gly														
65															

<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 120
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 180
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 240
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 300
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 360

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 420
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 720
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 1426

<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

Met	Asp	Glu	Ala	Leu	Glu	Thr	Gln	Leu	Lys	Thr	Ser	Arg	Gly	Arg	Phe
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Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20					25					30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35					40					45			
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50					55					60				
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65					70					75				80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

85								90				95			
Asp	Thr	Thr	Glu	Thr	Ser	Gly	Pro	Gly	Asn	His	Pro	Glu	Arg	Cys	Gly
100								105				110			
Val	Pro	Ser	Pro	Glu	Cys	Glu	Ser	Phe	Leu	Glu	His	Leu	Gln	Arg	Ala
115								120				125			
Leu	Arg	Ser	Arg	Phe	Arg	Leu	Arg	Leu	Leu	Gly	Val	Arg	Gln	Ala	Gln
130								135				140			
Pro	Leu	Cys	Glu	Glu	Leu	Cys	Gln	Ala	Trp	Phe	Ala	Asn	Cys	Glu	Asp
145								150				155			
Asp	Ile	Thr	Cys	Gly	Pro	Thr	Trp	Leu	Pro	Leu	Ser	Glu	Lys	Arg	Gly
165								170				175			
Cys	Glu	Pro	Ser	Cys	Leu	Thr	Tyr	Gly	Gln	Thr	Phe	Ala	Asp	Gly	Thr
180								185				190			
Asp	Leu	Cys	Arg	Ser	Ala	Leu	Gly	His	Ala	Leu	Pro	Val	Ala	Ala	Pro
195								200				205			
Gly	Ala	Arg	His	Cys	Phe	Asn	Ile	Ser	Ile	Ser	Ala	Val	Pro	Arg	Pro
210								215				220			
Arg	Pro	Gly	Arg	Arg	Gly	Arg	Glu	Ala	Pro	Ser	Arg	Arg	Ser	Arg	Ser
225								230				235			
Pro	Arg	Thr	Ser	Ile	Leu	Asp	Ala	Ala	Gly	Ser	Gly	Ser	Gly	Ser	Gly
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Ser	Gly	Ser	Gly	Pro											
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<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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120
aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa
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720

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 3149

<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

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			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro	
			35				40				45				
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
			50			55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70					75				80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
			85						90					95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
			115				120				125				
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
			130			135					140				
Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu

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Gln His Asp Cys Thr Phe Asp His Met Gly Arg Gly Arg Glu Glu Ala						
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Ile Met Lys Met Val Lys Leu Asp Arg Lys Val Gly Arg Ser Cys Gln						
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<210> 3757

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3757

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<210> 3758

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3758

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 Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
 50 55 60
 Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
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 Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
 85 90 95
 Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
 100 105 110
 Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
 115 120 125
 Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
 130 135 140
 Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
 145 150 155 160
 Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
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 Phe Arg Asp Gly Lys Ser Phe
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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 720
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<211> 100

<212> PRT

<213> Homo sapiens

<400> 3760

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Arg	Asn	Pro	Glu	His	Cys	Pro	Cys	Gly	Glu	Lys	Arg	Asp	Trp	Glu	Glu
			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
		50				55					60				
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
				70						75				80	
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
															100

<210> 3761

<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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 180
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<210> 3762
 <211> 75
 <212> PRT
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<400> 3762
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<210> 3763
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 <212> DNA
 <213> Homo sapiens

<400> 3763
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<210> 3764

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764

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			20					25					30		
Ser	Pro	Arg	Cys	Ala	Ala	Thr	Met	Ala	Ser	Ser	Asp	Glu	Asp	Gly	Thr
		35					40					45			
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Arg	Arg	Arg	Leu	Gly	Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp
65					70				75					80	
Ile	Ala	Met	Thr	Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg
			85					90						95	
Phe	Tyr	Met	Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln
		100					105						110		
Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His
	115					120						125			
Cys	Leu	Ile	Gly	Ile	Val	Pro	Thr	Ser	Val	Ile	Val	Thr	Gly	Val	Gln
	130					135					140				
Val	Ser	Ser	Arg	Ile	Phe	Met	Val	Trp	Leu	Ile	Thr	His	Ser	Ile	Lys
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Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	Trp	Thr
			165					170						175	
Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asp
	180							185					190		
His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	Phe	Phe	Ile	Ile
	195					200						205			
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	210					215					220				
Leu	Pro	Tyr	Val	Lys	Lys	Thr	Gly	Met	Phe	Ser	Ile	Arg	Leu	Pro	Asn
225				230					235					240	
Lys	Tyr	Asn	Val	Ser	Phe	Asp	Tyr	Tyr	Tyr	Phe	Leu	Leu	Ile	Thr	Met

				245						250						255
Ala	Ser	Tyr	Ile	Pro	Leu	Phe	Pro	Gln	Leu	Tyr	Phe	His	Met	Leu	Arg	
			260					265					270			
Gln	Arg	Arg	Lys	Val	Leu	His	Gly	Glu	Val	Ile	Val	Glu	Lys	Asp	Asp	
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<210> 3765

<211> 2764

<212> DNA

<213> Homo sapiens

<400> 3765

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1260

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<210> 3766

<211> 464

<212> PRT

<213> Homo sapiens

<400> 3766

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Arg Arg Arg Arg Gly Pro Ile Gly Arg Val Asn Met Asp Leu Glu Asn
          35           40           45
Lys Val Lys Lys Met Gly Leu Gly His Glu Gln Gly Phe Gly Ala Pro
          50           55           60
Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp
65           70           75           80
Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val
          85           90           95
Leu Leu Ser Asn Glu Glu Asp Arg Lys Val Gly Lys Leu Phe Glu Asp
          100          105          110
Thr Lys Tyr Thr Thr Leu Ile Ala Lys Leu Lys Ser Asp Gly Ile Pro
          115          120          125
Met Tyr Lys Arg Asn Val Met Ile Leu Thr Asn Pro Val Ala Ala Lys
          130          135          140
Lys Asn Val Ser Ile Asn Thr Val Thr Tyr Glu Trp Ala Pro Pro Val
          145          150          155          160
Gln Asn Gln Ala Leu Ala Arg Gln Tyr Met Gln Met Leu Pro Lys Glu
          165          170          175
Lys Gln Pro Val Ala Gly Ser Glu Gly Ala Gln Tyr Arg Lys Lys Gln
          180          185          190
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          195          200          205
Glu Leu Ser Pro Arg Glu Val Lys Glu Met Glu Gln Phe Val Lys Lys
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Tyr Lys Ser Glu Ala Leu Gly Val Gly Asp Val Lys Leu Pro Cys Glu
          225          230          235          240
Met Asp Ala Gln Gly Pro Lys Gln Met Asn Ile Pro Gly Gly Asp Arg
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Ser Thr Pro Ala Ala Val Gly Ala Met Glu Asp Lys Ser Ala Glu His
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Lys Arg Thr Gln Tyr Ser Cys Tyr Cys Cys Lys Leu Ser Met Lys Glu
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Gly Asp Pro Ala Ile Tyr Ala Glu Arg Ala Gly Tyr Asp Lys Leu Trp
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His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp
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Met Ile Tyr Phe Trp Lys Asn Glu Lys Leu Tyr Cys Gly Arg His Tyr
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Cys Asp Ser Glu Lys Pro Arg Cys Ala Gly Cys Asp Glu Leu Ile Phe
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Ser Asn Glu Tyr Thr Gln Ala Glu Asn Gln Asn Trp His Leu Lys His
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<210> 3767

<211> 2439

<212> DNA

<213> Homo sapiens

<400> 3767

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1140

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<211> 379

<212> PRT

<213> Homo sapiens

<400> 3768

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<211> 1931

<212> DNA

<213> Homo sapiens

<400> 3769

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<211> 447

<212> PRT

<213> Homo sapiens

<400> 3770

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Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser Gly Cys Pro Lys Ser		365
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<211> 1514

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3772

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<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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Ser	Cys	Asp	Val	His	Arg	Pro	Leu	Lys	Phe	Leu	Val	Trp	Asp	Tyr	Asp
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Cys Ile Asn Pro Lys Tyr Arg Asp Lys Lys Lys Asn Tyr Lys Asn Ser		
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Gly Val Val Val Leu Ala Asp Leu Lys Phe His Arg Val Tyr Ser Phe		
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Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile		
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Asp Phe Thr Ala Ser Asn Gly Asp Pro Arg Ser Ser Gln Ser Leu His		
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Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala		
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Phe Gly Phe Gly Ala Arg Ile Pro Pro Asn Phe Glu Val Ser His Asp		
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Phe Ala Ile Asn Phe Asn Pro Glu Asp Asp Glu Cys Glu Gly Ile Gln		
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Gly Val Val Glu Ala Tyr Gln Asn Cys Leu Pro Arg Val Gln Leu Tyr		
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Gly Pro Thr Asn Val Ala Pro Ile Ile Ser Lys Val Ala Glu Pro Ala		
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Gln Arg Glu Gln Ser Thr Gly Gln Ala Thr Lys Tyr Ser Val Leu Leu		
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Val Leu Thr Asp Gly Val Val Ser Asp Met Ala Glu Thr Arg Thr Ala		
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Ile Val Arg Ala Ser Arg Leu Pro Met Ser Ile Ile Ile Val Gly Val		
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Gly Asn Ala Asp Phe Ser Asp Met Arg Leu Leu Asp Gly Asp Asp Gly		
595	600	605
Pro Leu Arg Cys Pro Arg Gly Glu Pro Ala Leu Arg Asp Ile Val Gln		
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Phe Val Pro Phe Arg Glu Leu Lys Asn Ala Ser Pro Ala Ala Leu Ala		
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Lys Cys Val Leu Ala Glu Val Pro Lys Gln Val Val Glu Tyr Tyr Ser		
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<210> 3775

<211> 549

<212> DNA

<213> Homo sapiens

<400> 3775

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<210> 3776

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3776

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Pro	Met	Glu	Gln	Asn	Val	Ala	Glu	Leu	Leu	Gln	Phe	Leu	Leu	Val	Lys
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Val	Lys	Glu	Tyr	Arg	Asn	Gln	Phe	Pro	Glu	Ile	Leu	Arg	Arg	Ala	Ala
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Ala	His	Leu	Glu	Cys	Ile	Phe	Arg	Phe	Glu	Leu	Arg	Glu	Leu	Asp	Pro
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Glu	Ala	His	Thr	Tyr	Ile	Leu	Leu	Asn	Lys	Leu	Gly	Pro	Val	Pro	Phe
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Met	Ile	Leu	Gly	Gln	Ile	Phe	Leu	Asn	Gly	Asn	Gln	Ala	Lys	Glu	Ala
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Glu	Ile	Trp	Glu	Met	Leu	Trp	Arg	Met	Gly	Val	Gln	Arg	Glu	Arg	Arg
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Leu	Ser	Ile	Phe	Gly	Asn	Pro	Lys	Arg	Leu	Leu	Ser	Val	Glu	Phe	Val
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<210> 3777

<211> 4915

<212> DNA

<213> Homo sapiens

<400> 3777

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<210> 3778

<211> 1049

<212> PRT

<213> Homo sapiens

<400> 3778

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Glu Lys Arg Asn Lys Ile Glu Glu Ala Pro Glu Ala Thr Pro Gln Pro
          35          40          45
Ser Gln Pro Gly Pro Ser Ser Pro Ile Ser Leu Ser Ala Glu Glu Glu
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Asn Ala Glu Glu Glu Val Ser Arg Ala Asn Thr Pro Asp Ser Asp Ile
65          70          75          80
Thr Glu Lys Thr Glu Asp Ser Ser Val Pro Glu Thr Pro Asp Asn Glu
          85          90          95
Arg Lys Ala Ser Ile Ser Tyr Phe Lys Asn Gln Arg Gly Ile Gln Tyr
          100         105         110
Ile Asp Leu Ser Ser Asp Ser Glu Asp Val Val Ser Pro Asn Cys Ser
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Asn Thr Val Gln Glu Lys Thr Phe Asn Lys Asp Thr Val Ile Ile Val
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Ser Glu Pro Ser Glu Asp Glu Glu Ser Gln Gly Leu Pro Thr Met Ala
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Arg Arg Asn Asp Asp Ile Ser Glu Leu Glu Asp Leu Ser Glu Leu Glu
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Asp Leu Lys Asp Ala Lys Leu Gln Thr Leu Lys Glu Leu Phe Pro Gln
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Arg Ser Asp Asn Asp Leu Leu Lys Leu Ile Glu Ser Thr Ser Thr Met
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Asp Gly Ala Ile Ala Ala Ala Leu Leu Met Phe Gly Asp Ala Gly Gly
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Asp Glu Phe Asn Asp Asp Gln Ser Ile Lys Lys Thr Arg Leu Asp His
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Lys Gln Glu Leu Arg Glu Val Leu Lys Glu His Glu Trp Met Tyr Thr
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Tyr Ala Ser Gln Ser Glu Val Pro Asn Gly Lys Glu Val Ser Ser Arg
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Ser Gln Asn Tyr Pro Lys Asn Ala Thr Lys Thr Lys Leu Lys Gln Lys
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Val Phe Asn Pro Lys Arg Val Val Glu Asp Ser Glu Tyr Asp Ser Gly

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His Cys Lys Thr Leu Ile Gln Glu Arg Asp Val Val Ile Arg Leu Met					
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Tyr Gln Glu Gly Asn Asn Gly Pro His Leu Ile Val Val Pro Ala Ser					
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr					
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Tyr Asn Cys Ala Ile Ser Ser Ser Asp Asp Arg Ser Leu Phe Arg Arg					
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Leu Lys Leu Asn Tyr Ala Ile Phe Asp Glu Gly His Met Leu Lys Asn					
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<210> 3779

<211> 1853

<212> DNA

<213> Homo sapiens

<400> 3779

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<210> 3780

<211> 530

<212> PRT

<213> Homo sapiens

<400> 3780

His Arg Glu Lys Glu Asp Ile Lys Ile Thr Lys Glu Arg Thr Pro Glu

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Asn Gly Asp Ile Asn Tyr Asp Tyr Val His Glu Leu Ser Leu Glu Met			
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Val Val Arg Ser Lys Leu Ser Pro Ser Pro Ser Leu Arg Lys Ser Ser			
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Ser Pro Pro Pro Pro Ile Pro Glu Asp Ile Ala Leu Gly Lys Lys Tyr			
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Lys Glu Lys Tyr Lys Val Lys Asp Arg Ile Glu Glu Lys Thr Arg Asp			
	165	170	175
Gly Lys Asp Arg Gly Arg Asp Phe Glu Arg Gln Arg Glu Lys Arg Asp			
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Lys Pro Arg Ser Thr Ser Pro Ala Gly Gln His His Ser Pro Ile Ser			
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Ser Arg His His Ser Ser Ser Ser Gln Ser Gly Ser Ser Ile Gln Arg			
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Arg Thr Leu Thr Pro Pro Leu Arg Arg Ser Ala Ser Pro Tyr Pro Ser			
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	260	265	270
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	275	280	285
Ser His Asp Arg Arg His Glu Gly Arg Glu Asp Thr Arg Gly Lys Arg			
	290	295	300
Asp Arg Glu Lys Asp Ser Arg Glu Glu Arg Glu Tyr Glu Gln Asp Gln			
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Ser Ser Ser Arg Asp His Arg Asp Asp Arg Glu Pro Arg Asp Gly Arg			
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Thr Lys Glu Ser Arg Asp Pro Arg Asp Ser Arg Ser Thr Arg Asp Ala			
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<211> 112

<212> PRT

<213> Homo sapiens

<400> 3782

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Cys	Thr	Gly	Gly	Asp	Ser	Tyr	His	Pro	His	Glu	Gln	Ser	Ser	Pro	Pro
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Ile	Phe	Ser	Lys	Gln	Ser	Trp	Ala	Leu	Thr	Pro	Leu	Glu	Arg	Gly	Arg
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<210> 3783

<211> 4137

<212> DNA

<213> Homo sapiens

<400> 3783

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<210> 3784

<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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			20					25					30		
Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu
		35					40					45			
His	Val	Ile	Ala	Ile	Glu	Asp	Ala	Phe	Val	Asn	Ser	Gln	Glu	Trp	Thr
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Leu	Ser	Arg	Ser	Val	Pro	Glu	Leu	Lys	Val	Gly	Ile	Val	Gly	Asn	Leu
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Ala	Ser	Gly	Lys	Ser	Ala	Leu	Val	His	Arg	Tyr	Leu	Thr	Gly	Thr	Tyr
			85						90					95	
Val	Gln	Glu	Glu	Ser	Pro	Glu	Gly	Gly	Arg	Phe	Lys	Lys	Glu	Ile	Val
			100					105					110		
Val	Asp	Gly	Gln	Ser	Tyr	Leu	Leu	Leu	Ile	Arg	Asp	Glu	Gly	Gly	Pro
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			165						170					175	
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Ala	Arg	Ala	Arg	Lys	Leu	Ser	Asn	Asp	Leu	Lys	Arg	Cys	Thr	Tyr	Tyr
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Cys	Ala	Pro	Ile	Ser	Ser	Pro	Lys	Thr	Asn	Gly	Leu	Ser	Lys	Asp	Met	
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<211> 1901

<212> DNA

<213> Homo sapiens

<400> 3785

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<210> 3786

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3786

Met	Thr	Gly	Ser	Gly	Val	Asp	Ala	Arg	Thr	Ala	Ser	Ser	Gly	Ser	Ser
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Val	Trp	Glu	Gly	Gln	Leu	Gln	Ser	Leu	Val	Leu	Ser	Glu	Tyr	Ala	Ser
			20					25					30		
Thr	Glu	Met	Ser	Leu	His	Ala	Leu	Tyr	Met	His	Gln	Leu	His	Lys	Gln
		35					40					45			
Gln	Ala	Gln	Ala	Glu	Pro	Glu	Arg	His	Val	Trp	His	Arg	Arg	Glu	Ser
	50					55				60					
Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro	Asp	Glu	Gly	Gly	Glu	Gly	Ala	Arg
65				70					75					80	
Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser	Ala	Ser	Tyr	Pro	Cys	Ala	Ala	Pro
			85					90					95		
Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe	Gln	Arg

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          100          105          110
Arg Tyr Gly Gly Ile Thr Asp Pro Gly Thr Val Pro Arg Val Pro Ser
          115          120          125
His Phe Ser Arg Leu Pro Leu Gly Gly Trp Ala Glu Asp Gly Gln Ser
          130          135          140
Ala Ser Arg His Pro Glu Pro Val Pro Glu Glu Gly Ser Glu Asp Glu
145          150          155          160
Leu Pro Pro Gln Val His Lys Val
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<210> 3787

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3787

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gtggttggtg ctgctgtggt gttatggaca ctgctagtgt taatacagca caataagaaa
180
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600
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<210> 3788

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3788

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Met Leu Gln Asn Thr Ala Ser Ile Asn Thr Glu Tyr Thr Glu Ser Leu
 1          5          10          15
Cys Ala Ser Ile Lys Leu Arg His Gly Ser Arg Ala Ala Pro Pro Gly
          20          25          30
Pro Trp Gly Ala Lys Cys Ser Trp Arg Gln Val Ala Lys Gly Glu His
          35          40          45
Leu Gly Gln Thr Pro Gly Phe Ser Ser Arg Leu Pro His Leu Pro Ala

```


50		55		60	
Ser	Leu	Leu	Ser	Trp	Leu
65		70		75	
Ala	Ala	Val	Ile	Thr	His
		85		90	
Ala	Val	Leu	Val	His	Met
		100		105	
Leu					

<210> 3789

<211> 4341

<212> DNA

<213> Homo sapiens

<400> 3789

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120
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180
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240
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300
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360
cttcaaacta tgaaggcgga cttaaccggg cacgttctcg tggaagatgt gatgggtttg
420
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1140

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<210> 3790

<211> 1092

<212> PRT

<213> Homo sapiens

<400> 3790

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 20          25          30
Leu Gln Val Leu Lys Ala Gln Ser Glu Asp Pro Leu Pro Glu Leu His
 35          40          45
Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser
 50          55          60
Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala
 65          70          75          80
Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
 85          90          95
Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
100          105          110
Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val
115          120          125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
130          135          140
Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu
145          150          155          160
Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
165          170          175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
180          185          190
Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
195          200          205
Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu
210          215          220
Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn
225          230          235          240
Leu Arg Thr Trp Leu Ala Arg Ile Glu Ser Glu Leu Ser Lys Pro Val
245          250          255
Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu
260          265          270
Gln Gln Asp Leu Gln Arg Asp Ile Glu Gln His Ser Ala Gly Val Glu
275          280          285
Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys
290          295          300
Ala Asn Glu Thr Glu Cys Asp Ser Ile Gln Gln Thr Thr Arg Ser Leu
305          310          315          320
Asp Arg Arg Trp Arg Asn Ile Cys Ala Met Ser Met Glu Arg Arg Met
325          330          335
Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr
340          345          350
Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys
355          360          365
Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys

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370	375	380
Arg Phe Glu Ala Phe Gln Arg Gln Ile His Glu Arg Leu Thr Gln Leu		
385	390	395
Glu Leu Ile Asn Lys Gln Tyr Arg Arg Leu Ala Arg Glu Asn Arg Thr		400
	405	410
Asp Thr Ala Ser Arg Leu Lys Gln Met Val His Glu Gly Asn Gln Arg		415
	420	425
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val Leu Arg Arg Leu Arg		430
	435	440
His Phe Thr Asn Gln Arg Glu Glu Phe Glu Gly Thr Arg Glu Ser Ile		445
	450	455
Leu Val Trp Leu Thr Glu Met Asp Leu Gln Leu Thr Asn Val Glu His		460
465	470	475
Phe Ser Glu Ser Asp Ala Asp Asp Lys Met Arg Gln Leu Asn Gly Phe		480
	485	490
Gln Gln Glu Ile Arg Leu Asn Thr Asn Lys Ile Asp Gln Leu Ile Val		495
	500	505
Phe Gly Glu Gln Leu Ile Gln Lys Ser Glu Pro Leu Asp Ala Val Leu		510
	515	520
Ile Glu Asp Glu Leu Glu Glu Leu His Arg Tyr Cys Gln Glu Val Phe		525
530	535	540
Gly Arg Val Ser Arg Phe His Arg Arg Leu Thr Ser Cys Thr Pro Gly		545
	550	555
Leu Glu Asp Glu Lys Glu Ala Ser Glu Asn Glu Thr Asp Met Glu Asp		560
	565	570
Pro Arg Glu Ile Gln Thr Asp Ser Trp Arg Lys Arg Gly Glu Ser Glu		575
	580	585
Glu Pro Ser Ser Pro Gln Ser Leu Cys His Leu Val Ala Pro Gly His		590
	595	600
Glu Arg Ser Gly Cys Glu Thr Pro Val Ser Val Asp Ser Ile Pro Leu		605
610	615	620
Glu Trp Asp His Thr Gly Asp Val Gly Gly Ser Ser Ser His Glu Glu		625
	630	635
Asp Glu Glu Gly Pro Tyr Tyr Ser Ala Leu Ser Gly Lys Ser Ile Ser		640
	645	650
Asp Gly His Ser Trp His Val Pro Asp Ser Pro Ser Cys Pro Glu His		655
	660	665
His Tyr Lys Gln Met Glu Gly Asp Arg Asn Val Pro Pro Val Pro Pro		670
	675	680
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly Lys Leu Leu Leu Pro		685
	690	695
Pro Gly Thr Asp Gly Gly Lys Glu Gly Pro Arg Val Leu Asn Gly Asn		700
705	710	715
Pro Gln Gln Glu Asp Gly Gly Leu Ala Gly Ile Thr Glu Gln Gln Ser		720
	725	730
Gly Ala Phe Asp Arg Trp Glu Met Ile Gln Ala Gln Glu Leu His Asn		735
	740	745
Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu Asn Ser Asp Ile Ser		750
	755	760
Ala Ile Thr Thr Trp Leu Lys Lys Thr Glu Ala Glu Leu Glu Met Leu		765
	770	775
Lys Met Ala Lys Pro Pro Ser Asp Ile Gln Glu Ile Glu Leu Arg Val		780
785	790	795
Lys Arg Leu Gln Glu Ile Leu Lys Ala Phe Asp Thr Tyr Lys Ala Leu		800

805 810 815
 Val Val Ser Val Asn Val Ser Ser Lys Glu Phe Leu Gln Thr Glu Ser
 820 825 830
 Pro Glu Ser Thr Glu Leu Gln Ser Arg Leu Arg Gln Leu Ser Leu Leu
 835 840 845
 Trp Glu Ala Ala Gln Gly Ala Val Asp Ser Trp Arg Gly Gly Leu Arg
 850 855 860
 Gln Ser Leu Met Gln Cys Gln Asp Phe His Gln Leu Ser Gln Asn Leu
 865 870 875 880
 Leu Leu Trp Leu Ala Ser Ala Lys Asn Arg Arg Gln Lys Ala His Val
 885 890 895
 Thr Asp Pro Lys Ala Asp Pro Arg Ala Leu Leu Glu Cys Arg Arg Glu
 900 905 910
 Leu Met Gln Leu Glu Lys Glu Leu Val Glu Arg Gln Pro Gln Val Asp
 915 920 925
 Met Leu Gln Glu Ile Ser Asn Ser Leu Leu Ile Lys Gly His Gly Glu
 930 935 940
 Asp Cys Ile Glu Ala Glu Lys Val His Val Ile Glu Lys Lys Leu
 945 950 955 960
 Lys Gln Leu Arg Glu Gln Val Ser Gln Asp Leu Met Ala Leu Gln Gly
 965 970 975
 Thr Gln Asn Pro Ala Ser Pro Leu Pro Ser Phe Asp Glu Val Asp Ser
 980 985 990
 Gly Asp Gln Pro Pro Ala Thr Ser Val Pro Ala Pro Arg Ala Lys Gln
 995 1000 1005
 Phe Arg Ala Val Arg Thr Thr Glu Gly Glu Glu Glu Thr Glu Ser Arg
 1010 1015 1020
 Val Pro Gly Ser Thr Arg Pro Gln Arg Ser Phe Leu Ser Arg Val Val
 1025 1030 1035 1040
 Arg Ala Ala Leu Pro Leu Gln Leu Leu Leu Leu Leu Leu Leu Leu Leu
 1045 1050 1055
 Ala Cys Leu Leu Pro Ser Ser Glu Glu Asp Tyr Ser Cys Thr Gln Ala
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 1075 1080 1085
 Pro Pro Pro Thr
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<210> 3791

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 3791

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 120
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 180
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 240
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 300

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 360
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<210> 3792

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3792

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			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
			35				40					45			
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
			50			55					60				
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
					70					75				80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
				85					90					95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
			100					105						110	
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
		115					120					125			
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
						135					140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
					150					155					160
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
				165					170					175	
Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

	180		185		190										
Glu	His	Ala	Met	Glu	Ala	Leu	Leu	Asn	Thr	Ser	Thr	Met	Glu	Gln	Ala
	195				200							205			
Thr	Glu	Tyr	Leu	Leu	Thr	His	Pro	Pro	Pro	Ile	Met	Gly	Gly	Val	Val
	210				215							220			
Arg	Asp	Leu	Ser	Met	Ser	Glu	Glu	Asp	Gln	Met	Met	Arg	Ala	Ile	Ala
225					230					235				240	
Met	Ser	Leu	Gly	Gln	Asp	Ile	Pro	Met	Asp	Gln	Arg	Ala	Glu	Ser	Pro
			245						250					255	
Glu	Glu	Val	Ala	Cys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Ala	Arg	Glu
	260						265						270		
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	275					280						285			

<210> 3793

<211> 360

<212> DNA

<213> Homo sapiens

<400> 3793

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120
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360

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<210> 3794

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3794

Val	Tyr	Thr	His	Thr	Glu	Cys	Val	Cys	Val	Cys	Val	Cys	Val	Cys	Val
1			5					10				15			
Cys	Val	Phe	Ile	Phe	Gln	Ile	Thr	Gly	Arg	Phe	Leu	Gly	Leu	Cys	Tyr
		20						25				30			
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys
		35					40					45			
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser
	50					55				60					
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu
65					70				75					80	
Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp
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<210> 3795

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3795

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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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          20           25           30
Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
          35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
          50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
          65           70           75           80
Asn Ser Pro Ser Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
          85           90           95
Tyr Leu Lys Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
          100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
          115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
          130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
          145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
          165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
          180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
          195          200          205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
          210          215          220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
          225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
          245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
          260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
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Glu Trp Arg Asn Glu Leu
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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ggggtgttcg tgcgctacga cttcgaggcc gacgcccact ggtggtcaga gaggacgcac
180

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<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
		35					40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
	50					55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75					80
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
		115					120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
		130				135					140				
Leu	Leu	Ile	Met	Thr	Phe	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu
145					150					155					160
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
			180					185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
		195					200					205			
Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
	210					215					220				
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
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His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
				245					250					255	
Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
			260					265					270		
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
		275					280					285			
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
	290					295					300				
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
305					310					315					320
Phe	Leu	Glu	Ser	Arg	Leu	His	Ile	Gln	Asp	Thr	Cys	Gly	Ile	Asn	Asn

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Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr
          340          345          350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His
          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
          435          440          445
Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
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Met Ala Ser Ser Val Pro Leu Val Pro
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<210> 3799

<211> 210

<212> DNA

<213> Homo sapiens

<400> 3799

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210

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<210> 3800

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3800

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20          25          30
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
35          40          45
Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr
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<210> 3801

<211> 4070

<212> DNA

<213> Homo sapiens

<400> 3801

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240
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<210> 3802

<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
			35				40					45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
			50			55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65					70				75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105					110		
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

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130	135	140
Ala Gly Ile Cys Leu Leu Ile Ile Ile Gln Leu Phe Val Ala Gly Leu		
145	150	155
Ile Val Leu Leu Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly		160
	165	170
Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val		175
	180	185
Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu		190
	195	200
Phe Glu Gly Ala Val Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr		205
	210	215
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro		220
225	230	235
Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile		240
	245	250
Tyr Phe Gln Gly Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr		255
	260	265
Arg Gly Gln Tyr Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn		270
	275	280
Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile		285
	290	295
Ser Gln Met Leu Ser Ala Arg Phe Ser Gly Asn Phe Leu Val Asn Leu		300
305	310	315
Leu Gly Gln Trp Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr		320
	325	330
Pro Val Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly		335
	340	345
Ser Val Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met		350
	355	360
Leu Gly Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly		365
	370	375
Ser Ser Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val		380
385	390	395
Met Arg Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr		400
	405	410
Ile Pro Thr Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser		415
	420	425
Val Leu Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu		430
	435	440
Leu Ala Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu		445
	450	455
Gln Ser Glu Val Gly Ser Met Gly Ala Leu Leu Phe		460
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<210> 3803

<211> 345

<212> DNA

<213> Homo sapiens

<400> 3803

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 180
 gaagcttatt cacgtatgag tcatgcattg gaagagatta aaaaattcct ggttcctgac
 240
 tacaatgatg aaattcgtca ggaacaacta cgtgaattat cttacttaaa tggctcagag
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<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
			50				55				60				
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70					75				80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
				85					90					95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
			100					105						110	
Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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 120
 aagagcccgt tgccctaccag atgccaggcc ctgtgcttcc tccctgccttt gaggttttgg
 180
 cttgtgatca accaggaggg aaacatggtt actgctcgcc aggaacctcg cctggctcctg
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 300
 ctactgccta tcaaaacgcc caccacaaat gcagtgcaca agtgcagagt gcacggcctg
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 420

tcacagccct accgcctggt gcacttcgag cctcacatgc gaccgagacg tcctcatcaa
480
atagcagact tggtccgacc caaggaccag attgcttact cagacaccag cccattcttg
540
atccttttctg aggcgtcgct ggcggtatctc aactccaggc tagagaagaa agttaagca
600
accaacttca ggcccaatat tgtaatttca ggatgcgatg tctatgcaga ggattcttgg
660
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720
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780
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900
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960
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1800
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1920
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1923

<210> 3806

<211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3806

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			20					25					30		
Pro	Leu	Arg	Phe	Trp	Leu	Val	Ile	Asn	Gln	Glu	Gly	Asn	Met	Val	Thr
	35					40						45			
Ala	Arg	Gln	Glu	Pro	Arg	Leu	Val	Leu	Ile	Ser	Leu	Thr	Cys	Asp	Gly
	50					55					60				
Asp	Thr	Leu	Thr	Leu	Ser	Ala	Ala	Tyr	Thr	Lys	Asp	Leu	Leu	Leu	Pro
65					70					75					80
Ile	Lys	Thr	Pro	Thr	Thr	Asn	Ala	Val	His	Lys	Cys	Arg	Val	His	Gly
				85					90					95	
Leu	Glu	Ile	Glu	Gly	Arg	Asp	Cys	Gly	Glu	Ala	Ala	Ala	Gln	Trp	Ile
			100					105					110		
Thr	Ser	Phe	Leu	Lys	Ser	Gln	Pro	Tyr	Arg	Leu	Val	His	Phe	Glu	Pro
		115					120					125			
His	Met	Arg	Pro	Arg	Arg	Pro	His	Gln	Ile	Ala	Asp	Leu	Phe	Arg	Pro
	130					135					140				
Lys	Asp	Gln	Ile	Ala	Tyr	Ser	Asp	Thr	Ser	Pro	Phe	Leu	Ile	Leu	Ser
145					150					155					160
Glu	Ala	Ser	Leu	Ala	Asp	Leu	Asn	Ser	Arg	Leu	Glu	Lys	Lys	Val	Lys
				165					170					175	
Ala	Thr	Asn	Phe	Arg	Pro	Asn	Ile	Val	Ile	Ser	Gly	Cys	Asp	Val	Tyr
			180					185					190		
Ala	Glu	Asp	Ser	Trp	Asp	Glu	Leu	Leu	Ile	Gly	Asp	Val	Glu	Leu	Lys
	195						200					205			
Arg	Val	Met	Ala	Cys	Ser	Arg	Cys	Ile	Leu	Thr	Thr	Val	Asp	Pro	Asp
	210					215						220			
Thr	Gly	Val	Met	Ser	Arg	Lys	Glu	Pro	Leu	Glu	Thr	Leu	Lys	Ser	Tyr
225					230					235					240
Arg	Gln	Cys	Asp	Pro	Ser	Glu	Arg	Lys	Leu	Tyr	Gly	Lys	Ser	Pro	Leu
				245					250					255	
Phe	Gly	Gln	Tyr	Phe	Val	Leu	Glu	Asn	Pro	Gly	Thr	Ile	Lys	Val	Gly
			260					265					270		
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		275					280								

<210> 3807
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 3807

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 120
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 180

ccctccccac gctccgcccc tgggtggctg cgctctttct gggccttttc tttttggccc
 240
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 372

<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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Arg	Tyr	Pro	Arg	Ala	Val	Ile	Val	Pro	Tyr	Leu	Val	Asp	Asp	Asp	Ala
			20					25					30		
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
			35				40					45			
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
			50				55				60				
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
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Gly	Gln	Phe	Ala	Ala											
					85										

<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120
 ataagctgtg actttttgcc cctgatgcca taagttggag ggtcctctgc tcaaaacata
 180
 tggtagacac ttctcttctt tttcatctgg tatcatgtat catctctcag atccaataag
 240
 aaaacattcc cagtccttc cctccctccc tagtaccaag gtcctcatct cagttttcat
 300
 ggggccatgg agggctgcct ctagtgatga gctggaatct taaggcctga aatagagcca
 360
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 420
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 480
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 540
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 780
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 1080
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 tcttactaat cttttctcaa tacctaaagt tcaaaatctc ttttgtcaat ctgttatcaa
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 1221

<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
		35				40					45				
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50				55						60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
65				70					75					80	
Trp	His	Arg	Ser	Ala	Thr	Thr	Arg	Gly	Pro	Asp	Pro	Thr	Trp	Glu	Leu
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Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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 120

acaccacgcc agatatctgg gcagcagggg catctgacct ggggtgcttg ctggcagcac
 180
 tgcctggaca gcagggcctc cttagggcca cctcccaacc cagctaggga gcgtcttaag
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 296

<210> 3812
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3812
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 35 40 45
 Thr Trp Gly Ala Cys Trp Gln His Cys Leu Asp Ser Arg Ala Ser Leu
 50 55 60
 Gly Pro Pro Pro Asn Pro Ala Arg Glu Arg Leu Lys Ala Cys Pro Pro
 65 70 75 80
 Cys Trp Ala Trp Val Gly Arg Ser Gly Thr Gly Pro Ser Arg
 85 90

<210> 3813
 <211> 1419
 <212> DNA
 <213> Homo sapiens

<400> 3813
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 420
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 480
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 660

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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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Gln	Asn	Asp	Arg	Thr	Pro	Leu	Val	Met	Val	His	Gly	Phe	Gly	Gly	Gly
		20						25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
	35					40						45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50				55					60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65				70					75					80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
		85						90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
		100					105						110		
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
	115					120						125			
Arg	Pro	Thr	Asn	Pro	Ser	Glu	Ile	Arg	Ala	Pro	Pro	Ala	Trp	Val	Lys
	130					135						140			
Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
145					150				155					160	
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				165					170					175			
Phe	Lys	Arg	Lys	Phe	Ala	Asp	Phe	Phe	Glu	Asp	Asp	Thr	Ile	Ser	Glu		
			180					185					190				
Tyr	Ile	Tyr	His	Cys	Asn	Ala	Gln	Asn	Pro	Ser	Gly	Glu	Thr	Ala	Phe		
		195					200					205					
Lys	Ala	Met	Met	Glu	Ser	Phe	Gly	Trp	Ala	Arg	Arg	Pro	Met	Leu	Glu		
	210					215					220						
Arg	Ile	His	Leu	Ile	Arg	Lys	Asp	Val	Pro	Ile	Thr	Met	Ile	Tyr	Gly		
225					230					235					240		
Ser	Asp	Thr	Trp	Ile	Asp	Thr	Ser	Thr	Gly	Lys	Lys	Val	Lys	Met	Gln		
			245						250					255			
Arg	Pro	Asp	Ser	Tyr	Val	Arg	Asp	Met	Glu	Ile	Lys	Gly	Ala	Ser	His		
		260						265					270				
His	Val	Tyr	Ala	Asp	Gln	Pro	His	Ile	Phe	Asn	Ala	Val	Val	Glu	Glu		
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Ile	Cys	Asp	Ser	Val	Asp												
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<210> 3815

<211> 3669

<212> DNA

<213> Homo sapiens

<400> 3815

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900

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<211> 707

<212> PRT

<213> Homo sapiens

<400> 3816

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Ala	Val	Gly	Ile	Ile	Ala	Trp	Thr	His	Gly	Asp	Pro	Arg	Lys	Val	Ile

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Ser	Pro	Leu	Val	Leu	Leu	Glu	Phe	Gln	Cys	Pro	Thr	Pro	Gln	Ile	Cys	
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Ala	Gly	Ile	Met	Val	Trp	Val	Met	Ile	Ile	Met	Val	Ile	Leu	Val	Leu	
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Phe	Arg	Val	Tyr	Leu	His	Leu	Arg	Gln	Thr	Trp	Leu	Ala	Phe	Met	Ile	
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Arg	Lys	Arg	Ile	Leu	Ile	Ala	Ile	Ala	Leu	Ile	Lys	Glu	Ala	Ser	Arg	
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Phe	Leu	Leu	Cys	Leu	Cys	Ile	Ala	Tyr	Trp	Ala	Ser	Thr	Ala	Val	Phe	
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Cys	Pro	Xaa	Tyr	Cys	Glu	Asn	Leu	Xaa	Asn	Pro	Glu	Thr	Phe	Pro	Ser	
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Ser	Asn	Glu	Ser	Arg	Gln	Cys	Pro	Asn	Ala	Arg	Cys	Gln	Phe	Ala	Phe	
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Tyr	Gly	Gly	Glu	Ser	Gly	Tyr	His	Arg	Ala	Leu	Leu	Gly	Leu	Gln	Ile	
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Leu	Ala	Ile	Val	Gln	Ile	Ile	Arg	Val	Ile	Leu	Glu	Tyr	Leu	Asp	Gln		
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Leu	Lys	Cys	Cys	Phe	Trp	Cys	Leu	Glu	Lys	Phe	Ile	Lys	Phe	Leu	Asn		
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Arg	Asn	Ala	Tyr	Ile	Met	Ile	Ala	Ile	Tyr	Gly	Thr	Asn	Phe	Cys	Thr		
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Ala	Val	Leu	Asp	Lys	Val	Thr	Asp	Phe	Leu	Phe	Leu	Leu	Gly	Lys	Leu		
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Leu	Ile	Val	Gly	Ser	Val	Gly	Ile	Leu	Ala	Phe	Phe	Phe	Phe	Thr	His		
			610					615					620				
Arg	Ile	Arg	Ile	Val	Gln	Asp	Thr	Ala	Pro	Pro	Leu	Asn	Tyr	Tyr	Trp		
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Val	Pro	Ile	Leu	Thr	Val	Ile	Val	Gly	Ser	Tyr	Leu	Ile	Ala	His	Gly		
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Phe	Phe	Ser	Val	Tyr	Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe		
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Leu	Glu	Asp	Leu	Glu	Arg	Asn	Asp	Gly	Ser	Ala	Glu	Arg	Pro	Tyr	Phe		
			675					680					685				
Met	Ser	Ser	Thr	Leu	Lys	Lys	Leu	Leu	Asn	Lys	Thr	Asn	Lys	Lys	Ala		
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<212> DNA
<213> Homo sapiens
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<212> PRT
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<213> Homo sapiens

<400> 3818

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Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
      35           40           45
Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
      50           55           60
Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Asp Leu Leu
 65           70           75           80
Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
      85           90           95
Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
      100          105          110
Gly Phe Val Cys Glu Leu Cys Arg Glu Gly Asp Val Leu Phe Pro Phe
      115          120          125
Asp Ser His Thr Ser Val Cys Ala Asp Cys Phe
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<210> 3819

<211> 1731

<212> DNA

<213> Homo sapiens

<400> 3819

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<210> 3820

<211> 535

<212> PRT

<213> Homo sapiens

<400> 3820

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Tyr	Phe	Phe	Thr	Asn	Cys	Ser	Ile	Ser	Phe	Thr	Ser	Leu	Gly	Asp
	35				40				45					
Ser	Trp	His	Phe	Glu	Gly	Ser	Trp	Ser	Cys	Ala	Gly	Ser	Cys	Phe
	50				55				60					
Ser	Cys	Phe	Phe	Arg	Tyr	Cys	Ala	Pro	Ser	Glu	Pro	Ala	Thr	Gly
65				70					75				80	
Arg	Lys	Phe	Asp	Gly	Ala	Gly	Arg	Val	Ala	Val	Glu	Arg	Arg	Arg
			85				90					95		
Ser	Ser	Ala	Gly	Phe	Pro	Cys	Ser	Gln	Arg	Ser	Arg	Arg	Pro	Ala
		100					105					110		
Pro	Gly	Arg	Gly	Ile	Thr	Asp	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg

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145	150	155
Gly Phe Glu Leu His Phe Trp Arg Lys Ile Cys Arg Asn Cys Lys Cys		
165	170	175
Gly Gln Glu Glu His Asp Val Leu Leu Ser Asn Glu Glu Asp Arg Lys		
180	185	190
Val Gly Lys Leu Phe Glu Asp Thr Lys Tyr Thr Thr Leu Ile Ala Lys		
195	200	205
Leu Lys Ser Asp Gly Ile Pro Met Tyr Lys Arg Asn Val Met Ile Leu		
210	215	220
Thr Asn Pro Val Ala Ala Lys Lys Asn Val Ser Ile Asn Thr Val Thr		
225	230	235
Tyr Glu Trp Ala Pro Val Gln Asn Gln Ala Leu Ala Arg Gln Tyr		
245	250	255
Met Gln Met Leu Pro Lys Glu Lys Gln Pro Val Ala Gly Ser Glu Gly		
260	265	270
Ala Gln Tyr Arg Lys Lys Gln Leu Ala Lys Gln Leu Pro Ala His Asp		
275	280	285
Gln Asp Pro Ser Lys Cys His Glu Leu Ser Pro Arg Glu Val Lys Glu		
290	295	300
Met Glu Gln Phe Val Lys Lys Tyr Lys Ser Glu Ala Leu Gly Val Gly		
305	310	315
Asp Val Lys Leu Pro Cys Glu Met Asp Ala Gln Gly Pro Lys Gln Met		
325	330	335
Asn Ile Pro Gly Gly Asp Arg Ser Thr Pro Ala Ala Val Gly Ala Met		
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Glu Asp Lys Ser Ala Glu His Lys Arg Thr Gln Tyr Ser Cys Tyr Cys		
355	360	365
Cys Lys Leu Ser Met Lys Glu Gly Asp Pro Ala Ile Tyr Ala Glu Arg		
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Ala Gly Tyr Asp Lys Leu Trp His Pro Ala Cys Phe Val Cys Ser Thr		
385	390	395
Cys His Glu Leu Leu Val Asp Met Ile Tyr Phe Trp Lys Asn Glu Lys		
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Leu Tyr Cys Gly Arg His Tyr Cys Asp Ser Glu Lys Pro Arg Cys Ala		
420	425	430
Gly Cys Asp Glu Leu Ile Phe Ser Asn Glu Tyr Thr Gln Ala Glu Asn		
435	440	445
Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
450	455	460
Leu Ala Gly Glu Ile Tyr Val Met Val Asn Asp Lys Pro Val Cys Lys		
465	470	475
Pro Cys Tyr Val Lys Asn His Ala Val Val Arg Ser Val Leu Arg Ile		
485	490	495
Trp Leu Pro Gln Pro Ala Leu Gly Leu Glu Phe Met Leu Phe Leu Lys		
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Pro Leu Thr Asn Gly Lys Gln Lys Ala Val Leu Leu Ser Arg Lys Gln		
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<211> 5212
<212> DNA
<213> Homo sapiens

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			325						330						335		
Pro	Phe	Met	Lys	Leu	Lys	Glu	Asn	Gly	Arg	Ala	Ile	Ser	Arg	Ser	Ser		
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<210> 3831

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3831

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<210> 3832

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3832

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Leu Ser Ser Ala Leu Ala Cys Tyr Gly Leu Ser Phe Leu Gln Leu His
      35             40             45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
      50             55             60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
      65             70             75             80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
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<210> 3833

<211> 1764

<212> DNA

<213> Homo sapiens

<400> 3833

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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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			20				25						30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
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Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro
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Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
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Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro
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Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu
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			165					170						175	
Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
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Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala
	210				215					220					
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Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala
			245					250						255	
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg
		260					265					270			
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
	275					280					285				
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

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Leu Arg Asp	Leu Ala Gln His	Pro Asp Gly Gly	Ala Lys Met	Ser Asp
305	310	315		320
His Arg Glu	Arg Leu Arg Asn	Ser Ala Cys	Ala Val Ser	Glu Gly Cys
	325	330		335
Thr Leu Leu	Ser Gln Ala Leu	Arg Glu Arg	Ser Ser Pro	Arg Thr Leu
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Pro Pro Val	Asn Ser Asn	Ser Val Asn		
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<210> 3835

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 3835

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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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			20					25					30		
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

		35					40				45				
Ala	Arg	Ala	Gly	Gly	Ser	Ser	Arg	Gly	Cys	Trp	Tyr	Tyr	Leu	Arg	Tyr
	50					55					60				
Phe	Phe	Leu	Phe	Val	Ser	Leu	Ile	Gln	Phe	Leu	Ile	Ile	Leu	Gly	Leu
65					70					75					80
Val	Leu	Phe	Met	Val	Tyr	Gly	Asn	Val	His	Val	Ser	Thr	Glu	Ser	Asn
				85					90					95	
Leu	Gln	Ala	Thr	Glu	Arg	Arg	Ala	Glu	Gly	Leu	Tyr	Ser	Gln	Leu	Leu
			100					105					110		
Gly	Leu	Thr	Ala	Ser	Gln	Ser	Asn	Leu	Thr	Lys	Glu	Leu	Asn	Phe	Thr
		115					120					125			
Thr	Arg	Ala	Lys	Asp	Ala	Ile	Met	Gln	Met	Trp	Leu	Asn	Ala	Arg	Arg
	130					135					140				
Asp	Leu	Asp	Arg	Ile	Asn	Ala	Ser	Phe	Arg	Gln	Cys	Gln	Gly	Asp	Arg
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Val	Ile	Tyr	Thr	Asn	Asn	Gln	Arg	Tyr	Met	Ala	Ala	Ile	Ile	Leu	Ser
				165					170					175	
Glu	Lys	Gln	Cys	Arg	Asp	Gln	Phe	Lys	Asp	Met	Asn	Lys	Ser	Cys	Asp
			180					185				190			
Ala	Leu	Leu	Phe	Met	Leu	Asn	Gln	Lys	Val	Lys	Thr	Leu	Glu	Val	Glu
		195					200					205			
Ile	Ala	Lys	Glu	Lys	Thr	Ile	Cys	Thr	Lys	Asp	Lys	Glu	Ser	Val	Leu
	210					215					220				
Leu	Asn	Lys	Arg	Val	Ala	Glu	Glu	Leu	Val	Glu	Cys	Val	Lys	Thr	
225					230				235						240
Arg	Glu	Leu	Gln	His	Gln	Glu	Arg	Gln	Leu	Ala	Lys	Glu	Gln	Leu	Gln
				245					250					255	
Lys	Val	Gln	Ala	Leu	Cys	Leu	Pro	Leu	Asp	Lys	Asp	Lys	Phe	Glu	Met
		260						265					270		
Asp	Leu	Arg	Asn	Leu	Trp	Arg	Asp	Ser	Ile	Ile	Pro	Arg	Ser	Leu	Asp
		275					280					285			
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Ile	Arg	Arg	Ala	Cys	Asp	His	Met	Pro	Ser	Leu	Met	Ser	Ser	Lys	Val
305					310					315					320
Glu	Glu	Leu	Ala	Arg	Ser	Leu	Arg	Ala	Asp	Ile	Glu	Arg	Val	Ala	Arg
				325					330					335	
Glu	Asn	Ser	Asp	Leu	Gln	Arg	Gln	Lys	Leu	Glu	Ala	Gln	Gln	Gly	Leu
			340					345					350		
Arg	Ala	Ser	Gln	Glu	Ala	Lys	Gln	Lys	Val	Glu	Lys	Glu	Ala	Gln	Ala
		355					360					365			
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470

475

<210> 3837

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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<210> 3838

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
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Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
	115						120					125			
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
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Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155					160
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
				165					170					175	
Asn	Thr	Glu	Gly	Val	Ala	Leu	Ala	Ser	Tyr	Gly	Met	Glu	Asp	Glu	Gly

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 195 200 205
 Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser
 210 215 220
 Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys
 225 230 235 240
 Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln
 245 250 255
 Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala
 260 265 270
 Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu
 275 280 285
 Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val
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 Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp
 305 310 315 320
 Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu
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 Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu
 340 345 350
 Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala
 355 360 365
 Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln
 370 375 380
 Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln
 385 390 395 400
 Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala
 405 410 415
 Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg
 420 425 430
 Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu
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 Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu
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 Asn Asn Ile Ile
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<210> 3839

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3839

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 180
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 240
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 660
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<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

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		20					25					30			
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
	35					40					45				
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50				55				60						
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65				70				75						80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
			85					90					95		
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
		100					105					110			
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115				120				125					
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130				135					140					
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145				150					155					160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
			165					170				175			
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
		180				185				190					
Arg	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp	
	195					200				205					
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
	210				215					220					
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
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245

250

<210> 3841
 <211> 367
 <212> DNA
 <213> Homo sapiens

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 atagtgtgct ttctcttcct cattgaacat ccgaacgacg tcaggtgctc ctccaccctg
 180
 gtgacgcact caaaaggcta tgagaatggg acaaacaggt tgagcctccc gaagccaatc
 240
 ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgcttgct gctctcagat
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 367

<210> 3842
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3842
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 Gly Ala Ile Val Ala Ala Met Gly Ile Val Cys Phe Leu Phe Leu Ile
 35 40 45
 Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser
 50 55 60
 Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile
 65 70 75 80
 Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu
 85 90 95
 Leu Leu Ser Asp Gly Lys Gly Ser Ile His Pro Asn His Val Val Ile
 100 105 110
 Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala
 115 120

<210> 3843
 <211> 712
 <212> DNA
 <213> Homo sapiens

<400> 3843
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 120
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 aagaagagca ggaaagacac ctcgaggaac tgctcggcct ccacatccca aggtcgcaag
 240
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 300
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 420
 aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc
 480
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<210> 3844

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3844

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			20					25					30		
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35					40					45			
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50					55				60					
Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65					70				75					80	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85					90					95		
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
		100						105					110		
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
	115					120						125			
Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
	130					135						140			

<210> 3845

<211> 2302

<212> DNA

<213> Homo sapiens

<400> 3845

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<210> 3846

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3846

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			20					25					30		
Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Ala	Glu
		35					40					45			
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly
	50					55					60				
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly
65					70					75				80	
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly
			85					90						95	
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
			100					105					110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
		115					120					125			
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
	130					135					140				
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg
145					150					155				160	
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly
			165					170					175		
Ala	Gly	Arg	Arg	Leu	Gln	Ala	Asp	Thr	Gly	Ala	Phe	Ser	Pro	Pro	Asp

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185

190

<210> 3847

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 3847

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1320

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<210> 3848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3848

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Phe	Lys	Lys	Ala	Val	Thr	Asp	Ala	Ile	Met	Ser	Arg	Arg	Ala	Ile	Arg
			20					25					30		
Asn	Met	Asn	Thr	Leu	Tyr	Pro	Asp	Ala	Thr	Pro	Glu	Glu	Leu	Gln	Ala
		35					40					45			
Met	Asp	Asn	Val	Cys	Ile	Ile	Cys	Arg	Glu	Glu	Met	Val	Thr	Gly	Ala
		50				55					60				
Lys	Arg	Leu	Pro	Cys	Asn	His	Ile	Phe	His	Thr	Arg	Trp	Glu	Gly	Pro
65					70				75					80	
Trp	Gly	Ala	Cys	Pro	Ala	Gly	Pro	Arg	Pro	Gln	Lys	Ala	Gly	Pro	Lys
			85					90					95		
Gly	Pro	Ala	Asp	Leu	Cys	Leu	Ala	Leu	Thr	Arg	Ser	Cys	Leu	Arg	Ser
			100					105					110		
Trp	Phe	Gln	Arg	Gln	Gln	Thr	Cys								
			115				120								

<210> 3849

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 3849

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